Clinical Lectures
ON
WOUND TREATMENT,
BY DRY AND INFREQUENT DRESSING, REST, AND PRESSURE.

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LECTURE II.

GENTLEMEN,—In wound treatment *pressure* is a most powerful and beneficial agency. It favours union by maintaining accurate coaptation, and prevents extravasation of blood and its products. When such extravasation has occurred, pressure is the quickest, the least painful, and the most successful agency in promoting its absorption.

How much more fascinating and fertile error often is than truth is well illustrated by the teaching of John Bell on the subject of pressure. How clearly he understood its value, how accurately he applied it, is proved by his admirable instructions for the treatment of compound fracture. "The steady firmness with which you support the parts helps the adhesion, prevents suppuration, and hinders an afflux of blood to the limb." Nothing truer. A few pages back, Bell gives the well-known illustration of the boxing-glove gangrenous hand of the boy whose forearm had been tightly bandaged by an ignorant man. This frightful example was made the basis of a general condemnation of rolling fractured limbs, and successive generations, fascinated by the sensational picture, have accepted the hasty generalisation, and forgotten the great truth of the instructions for applying methodical pressure to compound fractures.

A clear understanding of the value of compression, as distinguished from constriction, is of the very first importance to the successful treatment of wounds and of surgical injuries generally.

This patient, H. B——, a butcher, aged twenty-three, was admitted to Ward 1 on Jan. 3rd, at 11.30 P.M., having just previously slipped in the slaughter-house. There was a fracture about two inches from the tip of the right external malleolus, the internal lateral ligament was torn, and the foot freely movable laterally. The ankle was perceptibly swollen. Hot fomentations were ordered to be constantly applied.

Jan. 4th.—Morning: The swelling has increased in every direction; the foot and lower part of the leg are hot and tense; constant pain, greatly aggravated by the slightest movement. Hot fomentations to be continued.—5.30 P.M.: Pain unabated. Circumferential measurements:—

	Ankle, over mid heel.	Leg, 5 in. from sole of foot.	Leg, 9 in. from sole of foot.
Right limb...	14⅝ in.	9⅝ in.	11 in.
Left limb ...	13½ in.	8⅝ in.	10½ in.

The foot and lower two-thirds of the leg having been enveloped in a layer of fine cotton-wool, the ankle was immobilised with strips of moistened pasteboard, compressing bandage, and heavy lateral sand-bags.

The pain rapidly subsided. At the expiration of eighteen hours the man could lift the foot from the bed in comfort and without help. As slackness of the bandage indicated considerable subsidence of the swelling, I applied another roller, with firmer pressure, leaving the patient in perfect comfort.

8th.—5 P.M. (just four days after immobilisation and compression): The patient continues quite free from pain. On removing the dressing, and measuring the limb at the ink-marks left on Jan 4th, the dimensions are:—Centre of heel, 13½ in. (decrease an inch and a half); five inches from sole of foot, 9⅛ in. (decrease, five-eighths); nine inches from sole of foot, 10½ in. (decrease, half an inch). Ecchymosis extends from the roots of the toes to the knee. Skin cool and shrivelled.

11th.—1.30 P.M. (eighth day after admission): Continues quite easy; apparatus loose, taken down, and splints remoistened and bandaged with steady firmness. Ecchymosis of deeper hue and more extensive. The man was discharged, with instructions to attend as out-patient.

This patient, J. M——, a builder's foreman, came in to consult me from the country the 20th of December ult. The day previously, while working on a scaffold, he was knocked down by a falling mass of brickwork, severely bruising his right ankle. The boot was removed with difficulty, and the joint was at once found to be a great deal swollen and excessively painful on the slightest movement. He was removed home, and hot fomentations applied all through the night. The pain became more intense, and the swelling increased; sleep was impossible. When I saw the case, about twenty hours after the accident, the swelling of the lower part of the leg was so great that it was impossible to say if there were any fracture. Measurement round the point of the heel and ankle proved the injured side to be two inches more in circumference than the sound one. I covered the foot and lower half of the leg with cotton-wool, surrounded the ankle with strips of moistened pasteboard, applied a gently and evenly compressing bandage, and, with two outside strips of dry pasteboard, the man was removed, in comparative comfort, into the vehicle which had brought him in great pain. On returning home, he states that he was soon easy and fell asleep. I did not touch the limb until the 24th of December (fourth day), when the looseness of the bandages denoted the great subsidence of swelling. On removing the apparatus, deeply mottled bruising, quite purple at the back, extended from the roots of the toes up nearly to the knee. The outline of the ankle was now quite distinct, and there was scarcely any pain. I again covered with cotton-wool, and firmly rebandaged the splints which had just previously been remoistened, so as to ensure their accurate fit under the moulding pressure. At the expiration of a week the man was able to inspect building operations, and he has suffered nothing since, though it will, of course, be some time before he can regain full use of the joint.

A ready method for immobilising joints in similar cases is to break off strips of thin rough unglazed millboard, measuring about twelve inches in length and two in breadth. Placing them on a dish or metal tray, they very rapidly become quite soft on a jug of hot water being poured over them. The uneven broken edges bevil nicely under pressure, and the narrow strips fit easily. I first place one strip vertically on each side of the joint, previously covered with a layer of cotton-wool; bandage lightly; then diagonal strips, as in the accompanying sketch; and gently compressing bandage, other strips, and alternating layers of roller, may be added in proportion to the strength required. This lattice-work or diagonal bracing makes a perfectly-fitting and efficiently supporting case, quickly constructed and very easily applied. If the patient is to be removed at

once, dry strips of the same material may be fixed externally, but if he can at once be placed in a recumbent position, all that is needed is the support of lateral sand-bags. To be effective, these must be of sufficient weight, varying from twelve to twenty pounds each, and from eighteen inches to three feet in length, according to the joint injured and the patient's strength.

The patient now before you illustrates in a still more striking manner the principle inculcated in these lectures.

C. H——, aged seventy-two years, attended at the hospital on Dec. 7th ult. A short time previously she had fallen headforemost down a flight of stairs, and had sustained a wound on the top of the head two and a half inches long, not exposing the bone. There was also a fracture of both bones of the right forearm at the junction of the lower and middle thirds. That of the radius was a simple fracture, that of the ulna comminuted and compound through two wounds situated on the inner side of the limb, two and a half inches from the wrist. Each of these wounds was three-quarters of an inch in length. They were covered with dry lint pads, as was also the scalp wound; the hand and forearm fixed, in a semi-prone position, in the ordinary wooden splints. Contrary to advice, the patient refused to remain in the hospital. She returned three days afterwards (Dec. 10th), when she was admitted as an in-patient. She complained of feeling ill, and there was considerable pain, redness, and swelling about the head. On removing the lint pad, however, the wound was nearly healed. The head was covered with an oakum pad, and over it a layer of cotton-wool and gently compressing bandage. As there was no complaint of the forearm, it was not disturbed. The patient was put to bed, and a calomel-and-jalap purge administered. Feverishness passed off in a few hours, and the old lady continued to enjoy excellent health and spirits.

Dec. 17th (tenth day).—Splints removed for the first time. The lint over the wounds, which was hard and saturated with blood, not disturbed. No œdema or redness about the limb. Long slough of cellular tissue drawn out from the scalp wound. Dry dressings, with compression as before, applied to the scalp, and the arm-splints readjusted.

21st.—Scalp wound firmly healed. Arm exposed, showing two firm linear cicatrices; not much bony union. Appetite and general health very good. Arm-splints readjusted.

27th. — Scalp cicatrix sound and painless. Forearm firmer.

On Jan. 1st, three weeks after admission, the old lady felt so well that she insisted on going home for the new year. You now see her on the thirty-second day after the accident. The fracture of the forearm is consolidating satisfactorily, but there is a little discharge from the centre of the scalp wound. The scar has yielded a little since the old lady went out, but the surrounding skin is pale and healthy; the scar itself of normal pink hue and painless. The few drops of discharge are quite odourless, and the patient's health is excellent. The dry dressing and bandage re-applied.

Please to recall the extensive wound of the ear and bruising of the temporal region presented to you in a former lecture.[1] That patient was at once taken into the hospital, and, under dry dressing and pressure, union took place directly and without swelling. So I judge from experience it would have been in the case of the old lady, if she had not insisted on going out with two such severe injuries. But even when erysipelas of the scalp had set in, with redness, pain, and swelling about the head, and signs of constitutional indisposition, dry dressing and pressure answered perfectly. Under the old plan of wet applications, whether as lotions, fomentations, or poultices, phlegmonous erysipelas has a terrible tendency to spread, the discharge creeping, inoculating, undermining, and destroying. If you trust to position and rest, to regulation of the circulation by surface pressure and digital compression of main arterial trunks, to efficient drainage, whether by india-rubber pipes or dry absorbing pads, you will have the greatest possible reason for congratulating yourselves on the success of treatment, often under circumstances seemingly the most unfavourable.

I have very rarely seen more extensive injury to a limb repaired with less constitutional disturbance, with more perfect freedom from pain, and less loss of tissue at the seat of mischief, than in the lad before you, whose progress I have simply watched, while the treatment has been conducted throughout by our house-surgeon, Mr. Jordan Lloyd.

J. T——, aged nineteen, admitted into Ward 3, Dec. 19th, 1878. A few minutes previously, while passing between a wall and a horizontal steam-engine in motion, the crank struck his right leg. The following particulars of the consequent injury were noted at the time. There was a large irregular contused and lacerated wound at the outer and posterior surfaces of the upper part of leg. The wound commenced at centre of posterior part of knee, extruding outwards to external surface of leg about two inches anteriorly to head of fibula; it then passed downwards along the whole upper half of leg, measuring more than twelve inches, and dividing the soft structures down to the bones. The flesh flap was turned down the leg for five or six inches. The outer head of the gastrocnemius was completely divided, the upper part hanging loose in the wound, and the lower being retracted for several inches. The outer head of the soleus muscle was completely torn through, as were also both peronei muscles. The external popliteal nerve was intact, stretching like a cord across the wound. The fascia covering the tibialis anticus was lacerated, and the muscle protruded through it for a considerable distance. The fibula was smashed about an inch and a half from its head, the lower fragment drawn inwards. Two spiculæ were removed, one of which was an inch in length. The wound could be felt to extend for some distance between the muscular planes of the calf and nearly down to the tibia behind. There was rather free oozing, no distinct bleeding point. The knee-joint was not in any way implicated. The tibia was unbroken. The anterior and posterior tibial arteries pulsated, and there was no anæsthesia in limb below wound.

So soon as the patient was in bed, and the clothing removed, ether was administered by a qualified resident officer, who had considerable hospital experience. In his opinion, so extensive was the injury that it was useless to attempt to save the limb. Mr. Jordan Lloyd brought the edges together with twelve silver sutures, three drainage-tubes were inserted in varying directions for more than twenty-three inches, the lips of the wound supported by strips of lint soaked in styptic colloid, the part covered with muslin tenax, cotton-wool, and pasteboard splints from toes to hip. The limb was then firmly bandaged, elevated on pillows, and supported by long, heavy sand-bags. On account of pain at midnight, one-quarter of a grain of morphia was administered in a draught. The temperature the evening after admission was 97·3°. The day after there was not much pain; some slight bloody discharge had oozed through the dressings.

Dec. 21st.—Has passed a fair night. Not much pain; no fresh oozing; no tension about the case; no odour. Temperature 100·2°, the highest reached throughout the progress of the case.

23rd (fourth day after admission).—On removing the bandages the dressings are found saturated with blood-clot undergoing decomposition, and stinking. On removing it lightly with pledgets of dry lint, the limb beneath is pale and not swollen. The wound united in the greater part of its extent; no slough to be seen; strips of styptic lint not disturbed. Gauze and tenax-pad reapplied, with splints and gently-compressing bandage.

25th.—Feels all right; only a little watery and odourless discharge has permeated the dressings. Temperature 98·4°; pulse 96. To have meat diet.

27th (ninth day after admission, and second dressing).—All the apparatus completely removed. Tenax saturated with discharge, smelling offensively. Strips of styptic lint and eight stitches removed, also one foot of drainage-tube; wound healed for nearly ten inches of its length. No redness, œdema, pain, or bagging. Edges of wound supported with strips of elemi plaster. Dressing as before, with gauze and tenax bags, cotton-wool, pasteboard splints, and compressing bandage.

January 1st (third dressing, fourteenth day).—Pulse 100; respiration 22; temperature 98·4°. No oozing of discharge through dressings. Disagreeable odour outside limb. On exposing it, a little stinking fluid in tenax; wound solid throughout; granulations flush with skin, except opposite head of fibula, where the wound is about one inch and a half deep, and three-quarters of an inch in breadth. The remaining stitches and six inches of drainage-tube removed; limb pale and shrivelled; no bagging, no pain; tongue

[1] THE LANCET, Dec. 21st, 1878.

clean; appetite good; feels quite well, and wants to get up. Fresh strapping to support wound, and same dressing as before.

4th (fourth dressing, seventeenth day).—Pulse 96; respiration 20; temperature 98·3°. On exposing limb it looks pale and shrivelled; healing proceeding rapidly. A very slight amount of fetid discharge. The last piece of drainage-tube removed. Dressing on the same plan reapplied.

15th (twenty-seventh day after admission).—The patient can lift the limb off the bed without discomfort, and bend the knee at an obtuse angle.

I have now to call your attention to a case of compound fracture and dislocation of the ankle which proved fatal.

J. T——, a plumber aged forty-five, was admitted to Ward 1 the night of December 7th, 1878, evidently suffering from the effects of drink, in which he was stated to have been indulging heavily during the last few months, and almost continuously for the past three weeks. The lower end of the right tibia was found protruding one inch and a half through a wound about two and a half inches long in the normal situation of the internal malleolus. The projecting bone was stripped from all its surrounding structures, the cartilage over its articular end was exposed and uninjured. The fibula was broken obliquely from before downwards and backwards about two inches above the malleolus. The astragalus was completely dislocated inwards, carrying the attached lower fragment of the fibula with it. The tendons were exposed for nearly two inches; there was no injury to vessels. Under chloroform the dislocation was thoroughly reduced, the edges of the wound brought together with four silver points, a drainage-tube introduced into the wound, which was covered with strips of styptic colloid and cotton-wool; pasteboard splints from roots of the toes to the middle of the thigh, a gently compressing bandage and long sand-bags on each side fixed to limb, and the heel slightly raised. The temperature, which was 97·1° the evening of admission, rose to 101·1° in forty-eight hours; it never exceeded 102°. The report the next morning was that he had had a restless night, had been very sick, muscular twitchings were general and almost constant, the abdomen very tympanitic. The man died on December the 23rd, the seventeenth day from admission.

It would be tedious, and for present purposes useless, to go over the very full notes which we have of the case; suffice it to say that, with rare intervals, the delirium never ceased; though a special night-nurse was allotted to the case, she had the greatest difficulty in keeping the man in bed. He several times jerked the heavy sand-bags aside, lifted the limb, and nearly got out of bed. On the fourth day the pulse was 120, breathing 34. On the sixth day, pulse 94, breathing 40; the laboured respiration continued. The leg, dressed on an average every two days, yielded profuse stinking discharge. I replaced the gauze and the tenax bags with Parker's paper-fibre lint, and over it gauze and pitch-pine sawdust bags. With the latter, for the introduction of which we are indebted to Professor Porter, of Netley, I am exceedingly pleased. The paper-fibre lint is absorbent, and well deserves more extensive trial. On the 23rd of December, the seventeenth day, the man's face became dusky, the breathing more laboured, the pulse irregularly intermittent, and death occurred somewhat suddenly at 3.45 P.M.

Examination, seventy hours after death, showed congestion and œdema of both lungs; the whole posterior part of the right lung was covered by recent lymph, and the right pleural cavity contained several ounces of turbid bloody fluid. No abscess in lung-substance. The liver weighed ninety ounces; it and the kidneys were congested. In the subperitoneal tissue, in the hypogastric region, adjacent to the bladder, was an abscess of about two inches in diameter, which contained three or four ounces of thick yellow pus. Bladder and peritoneum quite healthy.

I transcribe our pathologist's notes of the state of the limb:—"There was no œdema, redness, or swelling in the leg; the wound was open and healing; there was no infiltration in the tissues of the foot. An abscess extended laterally in both sides of the limb, nearly as high as the knee-joint. The skin covering the whole anterior part of the middle third of the leg had disappeared, a large, irregular, clean ulcer remaining. The articular ends of the bones forming the ankle-joint appeared normal. No injection or erosion of the cartilages. The foot could be dislocated outwards quite readily. The fibula was broken transversely across, about one inch from the top of the malleolus, and there was a small spicula of bone broken off from the malleolus. There was no suppuration, either in the sheaths of any of the tendons about the joint or between the muscular planes of the leg."

There is no doubt that this man died from pyæmic infection, directly due to the injury, indirectly to his broken constitution in consequence of drink. How far was the plan of treatment of the wound responsible? Would it have been possible to save the limb or the life, or both, under the carbolic spray and its accessories, with or without immediate amputation? These are important questions which I suggest for your consideration. For the present I shall only add that I shall never amputate a limb while a man is in a state of drunken delirium, and as this patient was never out of it, I never contemplated removal of the limb. Compound dislocation of the ankle is one of those formidable injuries on the treatment of which authorities are not yet agreed. I confess to sharing the opinion expressed by Astley Cooper when his experience was at the ripest, that amputation is "unnecessary in the greater number of these accidents."

The man before you, who can walk five miles an hour without the slightest perceptible limp, was admitted into the Queen's Hospital on Jan. 9th, 1863, with a most severe compound dislocation of the right ankle. The note requesting my attendance at the hospital immediately on the patient's admission on Jan. 9th, 1863, stated as the object of my visit "to amputate leg." On arrival I found the instrument-table ready, and the resident officers did not conceal their astonishment at my expressed determination to endeavour to save the limb. Chloroform was administered, and the partially detached astragalus dissected out of its bed. The wound was then enlarged upwards to the extent of an inch, and the articular surface of the tibia sawn off, with malleoli. The wound was brought together by six points of metallic suture, and dressed with dry lint. The limb was placed in an extended position, covered with a layer of cotton-wool, and supported by three moistened pasteboard splints, and an accurately compressing circular bandage from the roots of the toes to mid-thigh. The limb was finally laid on a high pillow, having water in the centre, and sand in the lateral compartments.

Jan. 10th.—Has slept through the night, but is now and then troubled with slight pain and shooting in the limb. Temperature 100°; pulse 108; respiration 18. Milk diet.

11th.—Has slept all night. No pain.

13th.—A restless night, attributed to the omission of the usual draught (forty drops of laudanum) on the previous evening. Some pain in the instep. Bandages stained with discharge. Pulse 96; temperature 99·2°; respiration 20.

14th.—Quite easy.

15th.—Sleepless night; delirious, and wanting to get out of bed; hands tremulous; slight twitchings of the facial muscles; conjunctivæ jaundiced; tongue furred and swollen; bowels constipated. Pulse 105; respiration 24; temperature 101°. To have an ounce and a half of castor oil.

16th (seventh day, first dressing). — Limb free from pain and swelling; free suppuration from the wound. A piece of skin about two fingers in breadth and three inches in length is in a sloughy condition close to the wound. Pulse 102; temperature 99°; respiration 22. Wound dressed with weak solution of Condy's fluid. Apparatus readjusted with evenly compressing bandage, and suspended to a bed-cradle on a sand-and-water pillow, having a slip of half-inch board under the central or water compartment.

17th.—Comfortable night; bowels have acted naturally; tongue moist and clean. Pulse 99; temperature 99°; respiration 18. To have a mutton-chop.

21st (thirteenth day, second dressing).—Limb dressed as before; slough not yet separated; sutures removed; no redness or tension about the gaping wound, its edges having nowhere united. To have two eggs, a chop, and a pint of ale daily.

24th (sixteenth day, third dressing).—Slough separated; discharge healthy and less. A drainage-tube inserted in the wound and passed around the outer side of foot to the middle of the sole, here to emerge from between the pasteboard splints; wound dressed as before.

Feb. 2nd.—The drainage-tube acts very satisfactorily; discharge greatly lessened; wound contracting rapidly; dressedonce a week.

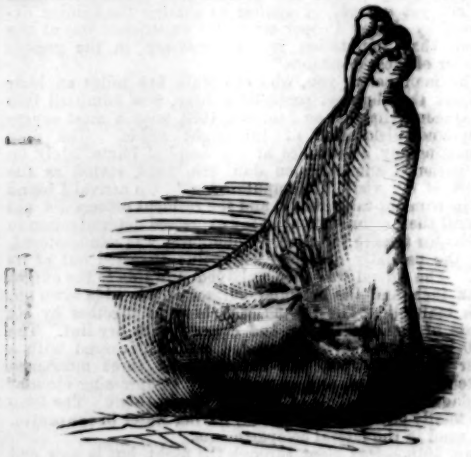
14th.—Drainage-tube withdrawn; discharge very trifling; no pain; man reports himself in good health, and eats and drinks well.

28th.—Little discharge; wound nearly healed. A small abscess over the lower end of the fibula was evacuated to-day.

March 10th.—The gap corresponding to the astragalus is filled up and comparatively firm.

20th (nine weeks after the accident).—Wound healed; bony union rapidly regaining solidity; pasteboards continued as far as the knee. Discharged from hospital, and ordered to attend as an out-patient.

In another month the man walked with a stick, which he gradually discontinued, regaining useful motion in the ankle and a perfectly useful limb, only shortened to the extent of three-quarters of an inch. Sixteen years have elapsed since the accident, the man has worked hard, and the foot (of which an engraving from photograph is annexed) has never failed.



A few words as to the drainage-tube. In this case it was brought out from the dressing between the pasteboard splints; in the preceding case, which terminated fatally, the distal end of the drainage-tube was imbedded in the tenax with which the limb was packed. I attach the utmost importance to the drainage-tube being brought out from the main dressings, so that, while these are left undisturbed, free percolation of discharges is secured.

Reviewing the cases embodied in this lecture, they support the proposition that the majority of wounds heal kindly, rapidly, and painlessly, on the principles here enunciated. That many of the substances employed—oakum and styptic colloid, to wit—possess antiseptic properties in a very marked degree is beyond question. I do not dispute, as for many generations has been admitted, that antiseptics are of service in surgical practice; but they are accessories, and not essentials. The essentials for successful wound treatment are—accurate coaptation, dry and infrequent dressing, uniform gentle pressure, and absolute rest.

DUBLIN HOSPITAL SUNDAY FUND.—At the annual meeting of the friends and supporters of this fund held last week, the president, Lord Meath, remarked, that amongst the most pressing wants in the hospitals was a more perfect system of nursing; and that a committee had been appointed for the purpose of going through the hospitals receiving aid from the fund, and of placing fully before the authorities the existing system in the Dublin hospitals. In the report on nursing, it was stated that it was not considered necessary to visit the Convalescent Home at Stillorgan, as there are no arrangements for nursing in this institution. It appears that at the Home there is only one woman who can properly be called a nurse, and that all the work of the institution is done by the convalescents themselves. The employment of a better class of nurses is urgently required in the hospitals, more especially of night nurses, also means of providing nurses to visit the sick poor in their own homes. In Belfast a valuable institution having the latter object in view has now been in operation for some years, and has been of the greatest service.

ABSTRACT OF

Lectures
ON THE
DIAGNOSIS OF EPILEPSY.

Delivered before the Harveian Society,

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LECTURE III.

THE following is partly recapitulatory and partly anticipatory.

(1) The severe cases are very often indeed preceded by slight seizures for months or years, preceded by attacks in which there may be not even loss of consciousness and next to no spasm.

(2) The slight are often mixed up with the severe ones; that is, sometimes the patient has the slight seizures and sometimes the severe ones.

(3) They are often together in one paroxysm. When he has a severe seizure, the earliest part of it is commonly the slight seizure, is what was, early in his case, the sole seizure; it is called a "warning" when it precedes the severe seizure, being really the inception of the severe fit.

(4) These seizures are said by authorities to be the worst for mind.

(5) There is a medico-legal interest. After the slight paroxysms, or, according to some, during them, the patient may act strangely or violently, or be apparently hysterical; he may be accused of indecent conduct, of robbery or culpable homicide, when the quasi-criminal actions were really done in a state of unconsciousness or sub-consciousness.

Two things are to be noted—first, that automatic and unconscious conduct after such fits varies in different cases from mere caricatures of simple normal actions, such as a patient blowing his nose with a newspaper, down to vague and apparently purposeless contortions. Second, that the most elaborate actions, the most normal-like, follow the slightest fits. The practical bearing of this is clear if we put it in another way, and say: "The patient acts most nearly normally after such fits as are most likely to escape observation." Thus, were his elaborate actions to be injurious to others, he would be supposed to be acting normally, to be responsible. To quote Tuke and Bucknill, "the very cases in which the most serious consequences follow are those in which it is most difficult to prove that disease sufficiently accounted for the act."

We have before our recapitulation spoken of paroxysmal affections of consciousness and of accompanying spasm. We spoke of negative mental states only, defect of consciousness, or loss of consciousness. But occasionally there is also an exactly opposite state along with the defect or loss of consciousness in or just after an epileptic paroxysm; there is a positive mental condition. The patient suddenly becomes vague as to his surroundings, and at the very same time, or in instant sequence, he has a "dreamy" feeling, often of some apparently former event. This is often called an intellectual aura. Again, in some cases there are, during or just after the paroxysms, actions more or less elaborate. There are thus two divisions of cases.

The patient remembers his mental state in the first division of cases, or of course we should know nothing about it, there being nothing for us to infer it from. But when a patient does anything after his fits, he remembers no mental state along with what he does, nor what he does.

We now enter into particular consideration of the first division—(1) *Dreamy states without actions.* There is in cases under this division some defect of consciousness, and some mental activity of a sort—what is commonly called an "intellectual aura," but which I metaphorically call a "dream."

It is not uncommon to hear a patient give as the warning of severe fits such an account as this. "It begins," said one of my patients, "by a sort of referring to old things, things that have happened," which he could not further describe; he added, too, that he lost himself. That is to say, he used two expressions which seem, but are not, contradictory: he had defect of highest, that is, latest, consciousness; he so far lost himself to his then surroundings, and yet had the mental state which was a revival of some organised states, if not exactly of some former event. Next he lost consciousness altogether, was convulsed, and bit his tongue.

I am not leaving the subject of slight seizures and straying into the consideration of severe cases in narrating a case in which severe convulsion with tongue-biting occurred. The interest of this case lies in the fact that for several months the patient had slight fits, which fits were exactly like what was ultimately the so-called warning (really first stage) of his severe ones; as he said he had "*this* reference to old things," and "lost himself" for a moment, before anything serious occurred.

A patient subject to very slight attacks said that he occasionally passed into a "dreamy state," and would fancy he saw the same things under the same combination of circumstances as he had once before seen them. To illustrate this, he said, pointing to it: "If I were to see that fender, I should say, 'Dear me! I saw that fender before.'" The sensation is to him pleasing; if he "thinks of something else" he can shake it off. All this patient's fits were slight; the greatest abnormality showing severity was that in one he slipped off his chair suddenly unconscious, but many of his fits were slighter; he would turn pale and "livid" in some. It was certain that they were epileptic; he had been subject to them eight years. In the first he passed urine, and so he did in one six years later. In his earliest attacks he had a metallic taste in his mouth.

Such "reminiscence" occurs in healthy people or in trivial and transitory disorders of health. They have been mentioned ages ago. I speak of cases in which the mental state occurs frequently and with some decided affection of consciousness in such slight paroxysmal conditions as merge into severe undoubted epileptic seizure. It may be said that these are mere curiosities. Not so, if they are, as they are, the precursors to epileptic convulsion, with tongue-biting. I dwell on these cases because they are somewhat unusual, and because I think they have not attracted due attention in this country.

A female patient, thirty-four years of age, gave as her warning of her epileptic seizure: "It seems as if I went back to all that occurred in my childhood—as if I see everything,—but so quick and soon gone that I cannot describe it." People rescued from drowning have made similar hyperbolical statements. She next, as a rule, becomes unconscious, but occasionally she has this feeling of "reminiscence" only. Unfortunately, except that she always passed urine in her fits, no account of the severe paroxysm was obtainable, except the so-called intellectual aura of it. The account of this warning was given in reply to the simple question, "How does the fit begin?"

A boy fourteen years of age expressed his so-called intellectual aura in boyish language. About every day he had two or three fits in succession. He said "I come over queer. I feel as if I was like lost—as if I were in some strange country." That his slight seizures were epileptic is proven by his having had also undoubted epileptic seizures.

Let me now mention other expressions of patients as to this voluminous mental state. Most vaguely it is described as a "dreamy state." Often it is said to be a feeling or thought which is indescribable. One patient used the expression "Old scenes revert." Another said, "If I were walking along and had a fit, I should think, 'Oh, I saw that before.'" This patient had also an epigastric sensation, which he described as "a sudden fear," "a pang," as if passing through an ordeal. A patient, whose case will be related, said, "A feeling of being somewhere else." His fits began by a sensation of smell. A highly educated man described it as a double consciousness. In detail, he said it was "the past as the present—a blending of past ideas with present"; again, "a peculiar train of ideas as of reminiscence of a former life, or rather, perhaps, of a former psychologic state." He then lost consciousness. Returning consciousness was like awakening from a dream or trance, the vision vanishing in spite of every effort to retain recollection of it. He said, "Sometimes I think I have it, and then it is gone." It may seem that this was reading philosophy *into* his symptom, but a poor boy described the feeling "in his head" at the beginning of his seizure as if he had two minds—an exactly equivalent expression. Another patient said, "A feeling of a past dream mixing up with the present." Another said he had "a trace of last night's dream," and also, "a thought accompanies it; can't usually remember it; in the last it was about gipsies." Another patient saw "various visions when not quite unconscious." It was once "a wood and some people"; another time, "pillars of an old Gothic church, and people standing in it."

We now speak of the Second Division of cases, in which the patient remembers no dreams, but acts. There are many degrees of elaborateness of actions after epileptic seizures, and all degrees of excitement along with the actions. One example is given.

A patient, aged forty-three, had been subject for three or four years to occasional attacks of loss of consciousness. I could get no account of any warning, and the patient denied having any actions after a seizure; yet he really had. In a letter after this visit the patient wrote: "I have also had an attack to-day out of doors before dinner. I was walking home from the City, and had got as far as the London Hospital, but ultimately found myself walking the contrary way, under some impression that I was going to the City." Of course, if "under the impression" means that he remembered some "dreamy reason" for going to the City, the case is exceptional; but I imagine, considering what follows, that it was his theory to explain his conduct. Later on he came with his assistant. He told me that the patient used to turn blue in the attack, but lately pale; there is movement of the hands and one leg is lifted. Whether these movements were really spasms, or only vague movements, whether parts of the paroxysm or post-paroxysmal, I could not ascertain. The assistant gave clear evidence of post-paroxysmal actions. Thus, in the last attack but one, or rather, as I believe, just *after* it, he became violent, caught hold of various parts of his assistant's body, and tried to drag him up stairs. The patient did get up stairs, and tried to take his clothes off; looked at his watch, and then looked out of the window. He was well in about fifteen minutes. The last attack was in a place of worship, whilst sitting in his pew; when his assistant spoke to him the patient said: "Do you want to see me on business?" In or rather just after a paroxysm, that patient might read a page correctly, and yet know nothing of it afterwards. For example, he once read a parish notice.

I will now relate a case showing both stages—(1) obscured consciousness, with "dreamy" state; and (2) loss of consciousness, with actions. There are probably three stages—(1) dreamy state; (2) loss of consciousness; (3) actions.

A labourer's daughter, twenty-nine years of age. She has had severe fits for about eight years. The severe fits occur at night; she bites her tongue in them, and, possibly because they occur in sleep, she has no warning of *them*. But besides these severe fits, she has slight ones, which she calls "sensations." The feeling arises that she is miles away, and where she knows not. This is the only remembered mental state. I confess I cannot understand this, and the same remark applies to many other cases; it implies two things—(1) that she is in the place where she really is; and (2) that she is somewhere else. Such impossibilities occur in ordinary dreams. A man dreams of riding on his own back; how a man can have, even in a dream, the mental state of riding on his own back, I cannot conceive. After the dreamy state this patient becomes unconscious, and then actions follow; she runs about the house; of this running about she knows nothing. She remembers her "dream" without actions, but not the actions. Once she had a slight fit—a "sensation"—in bed, got up, and ran about, and knocked her head against the bed-post. The woman who brought her remarked that the door was closed, adding that once after a sensation she had fallen down stairs in her "running." The patient passes urine in these sensations; so that were there no severe fits, with tongue-biting, we should declare the so-called sensations to be epileptic. If shaken in her runnings about, she stops, and in about twenty minutes comes to herself. There is probably some connexion betwixt her "dreamy state" of being "miles away" and the post-epileptic running about.

Inaugural Address

AT THE

OBSTETRICAL SOCIETY OF LONDON.

Delivered Feb. 5th, 1879,

BY W. S. PLAYFAIR, M.D., F.R.C.P.,

PRESIDENT OF THE SOCIETY.

GENTLEMEN,—My first and most pleasing duty is to offer to the Fellows of the Society my respectful and heartfelt thanks for the distinguished honour they have done me in electing me their President. Ever since I commenced practice in London this Society and its work has been one of my chief centres of professional interest, and I am proud to confess that it has always been to me a matter of anxious hope that at some distant time I might be privileged to hold the position which, through your favour, I assume to-night, far sooner than I had ever ventured to anticipate. I trust you will believe that I am correspondingly grateful, and that I will endeavour to the utmost of my ability to justify the confidence with which you have honoured me. And, indeed, I may truly say, for the encouragement of our younger Fellows, that I know of no class of work which more surely carries with it its own reward, in the highest sense of that word, than that in which such a Society as ours is engaged. In our hospitals and private practice we gain, it is true, much experience, but the contact with the experience of others, and the very criticism, sharp and unpleasant though it may sometimes be, which our most cherished views are apt to meet when brought under the notice of our fellow-labourers, is of inestimable value in preventing us from becoming over-dogmatic and one-sided, and in forcing on us that breadth of view which is so essential for a truly scientific practice of our profession.

It has been well remarked by one of our most talented essayists that, "whatever our calling, we can never rise in it unless we exalt to an exaggerated degree the elevation of the calling itself"; and he quotes, in illustration of this, Hazlitt's well-known saying, that "the city 'prentice who did not think the lord mayor in his gilded coach the greatest of human beings would come to be hanged." If I might paraphrase that dictum and apply it to ourselves, I might say that the obstetrician who did not consider his own department of practice to be the most important of all branches of medical science was unworthy of the office which, through your suffrages, I occupy to-night. Whatever, gentlemen, may be my failings and shortcomings in other respects, that, at least, is not one of them; for I have always felt, and striven to maintain to the utmost of my power, that, whether as a subject of scientific study, full of interest, possessing much ground yet untilled, and offering a rich harvest of results to the zealous cultivator, or as a branch of practice which includes much of the daily work of the practitioner, and involves the deepest and most anxious responsibilities which he has to deal with, there is no department of medicine of greater importance than that which it is the special province of this Society to foster and to advance. Unfortunately, as we all know, this view of the importance of obstetrics is not universally entertained, and there is still much prejudice and much misunderstanding amongst those who have the chief voice in the management of our ancient medical corporations, and, on that account, much influence upon medical legislation, as to the proper scope and position of this branch of medicine. In saying this, I attach no special blame. We all know how difficult it is to shake off old views and prejudices, how strong the conservative instinct is in all of us, and how much any given way of looking at a subject is a matter of education. I am therefore far from thinking that the non-recognition of the claims of obstetric medicine is at all surprising. On the contrary, in a department of practice the large development of which is of such recent date, it is, I believe, only what might have been expected, and might, I doubt not, be paralleled in a hundred other instances. At the same time, there is all the more reason why those who know better should use their utmost endeavours to bring about a more satisfactory state of things, and in this, in what may be called its political aspect, I cannot but think that a Society such as ours will find a most important sphere of work. The promised medical legislation, which is likely soon to occupy Parliament, will, no doubt, afford us abundant opportunity of expressing our views on such subjects as the licensing of midwives and the like, to which the attention of the Council has already been seriously directed. It is not, however, my intention to occupy your time by a consideration of all that might be done in this direction. There are, however, two points in particular on which I think it is our bounden duty to bring the weight of our opinion as strongly as possible before the profession, and on these I must beg your permission to make one or two brief observations.

One of these is the very unsatisfactory constitution of the Medical Council as regards obstetric medicine. It seems to me to be nothing less than absurd that in what is supposed to be a representative assembly, there should not be a single individual who practises that department in which nineteen out of twenty members of the profession are so largely interested. Is it surprising that whenever obstetric questions come before the Council they are dealt with in a manner which is so thoroughly unsatisfactory? Nor is there the slightest reason why this anomaly should exist. The names of several of our fellows will at once suggest themselves to you, who, from their position and talents, are in every way admirably qualified for a seat in the Council, and whose opinion would necessarily carry with it much weight.

The other point is the present state of the curriculum in the medical schools as regards obstetrics. This has been recently forcibly dwelt on by one of our vice-presidents, Dr. Edis, in his introductory address at the Middlesex Hospital School of Medicine, which is worthy of your study. The subject is not, however, a new one. All, or nearly all, the teachers of midwifery in London have already collectively expressed their opinion upon it, and to them, if they are desirous of doing their duty honestly, the question is one of vital moment. I confess that it is with a feeling of something akin to shame that I reflect that I am supposed to teach a class of young men the entire subject of Midwifery and the Diseases of Women and Children, in a short summer course of something under forty lectures. The thing is a manifest and ridiculous absurdity. Hence we have, of necessity, to omit, year by year, at least half of midwifery proper, while as to the diseases of women and children, it is simply impossible even to allude to them. The result is that students leave our schools more ignorant of obstetrics than of any other subject; acquiring by a superficial cram only sufficient knowledge to satisfy the limited requirements of most of our examining boards; and, if they are satisfied, as so many are, with the diploma of the Royal College of Surgeons only, even that limited acquaintance with midwifery is unnecessary. I suppose I am not guilty of any serious breach of confidence if I state that at a recent meeting of the Fellows of the College of Physicians, one of the examiners of the College, himself a respected ex-president of this Society, drew attention to the ignorance displayed by the candidates for the College licence as to the application of instruments, and proposed that the College should, by a circular, direct the attention of the teachers at the various schools to this point. I would venture to suggest that he was here putting the saddle on the wrong horse. It is not the teachers who are to blame for not effecting impossibilities, but the system, for which the College of Physicians is itself partly responsible. It is especially to be deplored that in the metropolis, where we should naturally expect a high example to be set, the medical corporations are the worst offenders in this respect; for while the Royal Colleges of Physicians and Surgeons, and even the University of London, are satisfied with a certificate of attendance on a single three months' course of lectures on Midwifery, the universities in Scotland insist on a course of not less than 100 lectures, while the Calcutta Medical College, an institution in every way admirable, with which I had myself the honour of being formerly connected, requires two courses of seventy lectures each. In the face of such facts, well may the late Principal of that College write to me, "I am proud to think

that some of you will not rest until you have seen this great evil set right. To what a hideous extent is the practice of midwifery carried on in England by utterly unqualified men, whom the unhappy women and their friends believe to be qualified, and the system in our hospitals sadly favours this." You, gentlemen, who have acquired the knowledge you ought to have gained at your schools by much subsequent study and painful experience could, I doubt not, tell many a sad story of blighted health and homes rendered desolate by this lamentable ignorance of a large and important part of practice. So long as legislation is conducted and examinations regulated by those who are themselves entirely ignorant of obstetrics, reform is next to hopeless. I think, however, that you will agree with me that it is the duty of a Society such as this to agitate the question, and not to rest satisfied until obstetrics are placed on an equality with the cognate subjects of medicine and surgery, with which, whatever may be said to the contrary, the common sense of the profession has long placed them, both as regards teaching at our schools and proper testing at our examinations. Nor has the Council of this Society, with whom the initiative in such matters chiefly rests, ever been backward in its duty on these points in the past, and it may be trusted to be no less mindful of the interest of our subject in the future, whenever a fitting opportunity presents itself.

Questions such as these, however, important though they be, have little to do with the practical work of our Society. It may not, perhaps, have struck many of you that we are this year entering on a very interesting epoch of our existence. Founded in the year 1858, we are commencing our twenty-first year, and are coming of age. Many of our original Fellows are happily still amongst us, some of them are, doubtless, here to-night, and I am sure that they may look with pride and complacency on the healthy and vigorous manhood of their child. Beyond any doubt the Obstetrical Society of London has far more than fulfilled the hopes and anticipations of its founders. The steady annual increase in the number of our Fellows is, of itself, as good a practical proof of its thoroughly satisfactory condition as could be desired; but much more important than this is the real honest work that it has done, the numerous valuable contributions to obstetric medicine contained in its Transactions, and the high opinion entertained of it by the profession in all parts of the world. When newly born there were some who looked with a little suspicion on the bantling, and held aloof from it. The Society always felt a lively regret that amongst these were two of the most eminent obstetricians in the metropolis, men whose support a society with our aims could ill afford to do without, and whose co-operation it would have given much to gain. If any further proof were required of the way in which our youth has been passed, it would be found in the fact that one of these now holds the office of our honorary President, the other has just vacated this chair, which he has filled for two years with an unfailing courtesy, and an unwearied effort to promote the interest of our Society, which have never been surpassed by any of his predecessors, and which need no comment from me, although they may well fill me with apprehension that, judged by so high a standard, you may deem in the future that I have failed in properly fulfilling the duties with which you have entrusted me.

If we are asked to what the exceptional success of the Society has been due, I think the proper answer would be that it was not to any special energy or talent on the part of its founders and Fellows, but to the fact that it deals with subjects of deep practical interest to a large majority of the profession, the discussion of which was nowhere else adequately attempted, and that it thus supplied an obvious want. Even this, however, would not have been a sufficient explanation, were it not that the subjects it more particularly is occupied with had made such astonishing progress within a comparatively short space of time. It is, of course, impossible for me to occupy your time with any attempt to prove this assertion by a review of the state of obstetric science as it is now and as it was at the time the Society was founded. It would not, however, be difficult to show you that even with regard to midwifery proper there are few departments of practice in which more work has been done in a short period; while as to gynecology, we may surely say that, as a scientific study, it is an entirely new creation. Take, for example, the standard works on Diseases of Women some of forty or fifty years ago, such as those of Sir Charles Mansfield Clarke and Gooch, and although they contain, especially the latter, much accurate observation and graphic description, yet you will not find in them even the most distant allusion to nine-tenths of the work with which the modern gynecologist is so familiar. The reason of this rapid progress is obvious. Until careful local examination, both digital and instrumental, was commonly practised in diseased conditions of the uterus, any knowledge of its morbid states was merely conjectural. The gynecologist, before this was common, was in the position of the general physician with regard to diseases of the heart and lungs before the discovery of auscultation, of the oculist who knew nothing of the ophthalmoscope, or of him who treats diseases of the larynx without the laryngoscope. Now we may truly say that there is no organ of the body the condition of which can be more accurately ascertained than that of the uterus. And it would be difficult to speak of this subject without recognising the extraordinary impetus it derived from the zeal of its earlier cultivators, especially from that of my old master, Sir James Simpson, whose contagious enthusiasm and energy, misdirected although we may admit them sometimes to have been, yet were of enormous value in promoting the study of the diseases peculiar to women.

Like all comparatively new subjects, however, gynecology has hitherto progressed more by empirical observations and experimental practice than by careful scientific investigation based on ascertained pathological facts. I would venture to impress this upon you as strongly as possible, because I am sure you will agree with me, that if we are to remedy our defects, it is wise frankly to recognise them. It is true that it is specially difficult for us to pursue the necessary pathological inquiries, since they are incompatible with the safe practice of midwifery. Still, empirical observations, which are not verified and tested in this way, are always apt to lead us astray. We can no more talk with certainty, for example, of such conditions as endometritis, flexions, or ovaritis, without a knowledge of the condition of the parts affected, than could the general physician of pneumonia from a study of crepitation and dulness on percussion only. It is from the want of this kind of knowledge, as it seems to me, that we have so much of those crude theories and hasty generalisations, with consequent errors in practice, on which our opponents are apt to insist so much. And it must, I fear, be admitted that there is some ground for this sneer. It is beyond doubt that we have had regrettable cycles of opinion as to the importance of certain classes of uterine disease. Some ten or fifteen years ago, every anxious female inquirer asked if she was ulcerated; now, most of our patients express the sentiment, if they do not use the words, of the lady who, the other day, imploringly said to me, "Doctor, for God's sake, tell me—am I displaced?" Admitting this, it is very far from being the case, as so many erroneously conclude, that no attention need be paid to such conditions as the so-called ulceration or abrasion, or to flexions. Rather let us draw from this the lesson to study these lesions more deeply; let us ascertain in what they really consist—what cases require treatment, and of what kind; and we may be sure that when our knowledge is deeper and more scientific than it is now, divergences of opinion and errors of practice will vanish. If our work is conducted in this spirit, we need have no fear that in due course of time it will gain the respect and adhesion of those who now look upon it with doubt and suspicion.

It has been objected to gynecology that it is more liable to abuse than many other departments of practice; that some of its followers have traded upon the fears and fancies of hysterical women, and magnified their ailments to their own advantage. I am not concerned to deny that there are some peculiarities in this line of practice which lend themselves to such deception, if the practitioner be dishonest enough to avail himself of them; but I do most strenuously deny that this has ever been the case to any appreciable extent; and if black sheep have existed or do exist among us, I am very sure that the free and open discussions of a Society such as this are, of all other things, the very best for bringing reprobation on such conduct, and preventing others from following the evil example.

And now, gentlemen, I shall not farther trespass upon your good-nature; but, in conclusion, shall, as it is most fitting I should, renew before you the obligation contained in our rules, which all of us have taken on joining the Society, "I hereby promise that I will, to the utmost of my power, promote the honour and interests of the Obstetrical Society of London."

ON THE RELATION OF FILARIA SANGUINIS HOMINIS TO THE ENDEMIC DISEASES OF INDIA.[1]

BY SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.

IN this paper I propose to draw attention to some aspects of an important helminthological discovery, and also to certain points on which, in its relation to endemic disease in India and other tropical and sub-tropical regions, further information may be anticipated.

I must say, at once, that I have nothing original of my own to communicate, but deal entirely with the work of others. I am glad to have this opportunity of testifying how deeply medical science is indebted to our brethren at home and abroad for their researches. I know of nothing that more practically illustrates the scientific zeal of our profession than the subject I have to bring before you.

In March, 1870, Dr. T. R. Lewis, of H.M. British Medical Service, made known his discovery of certain microscopic nematodes in chylous urine, and suggested their probable causal relation to that disordered state of the lymphatic system. In the appendix to the Sixth Annual Report of the Sanitary Commissioner with the Government of India, 1869, published in Calcutta in 1870, he states that when examining the urine of a patient, in Calcutta, suffering from chyluria, he discovered, amidst the fibro-albuminous matter in that fluid, the embryos of a new round worm, each time he repeated the examination, and noted appearances that indicated the existence of a sheath in which it was enclosed. He at first thought that what he saw were detached filaments of a fungus, but movement revealed their real nature. As to their size, considering that two hundred could pass abreast through a pin-hole, an orifice not exceeding one-fiftieth of an inch in diameter, it is not surprising that their existence had not been suspected. Lewis, I suppose, was not then aware that they had been seen, under similar circumstances, by Wucherer, in Bahia, in 1866. This appears to be the earliest notice of their existence in India, and certainly it was an original discovery of the greatest importance in its bearing on hitherto unsuspected causes of certain diseases. In July, 1872, when examining the blood of a native in the Calcutta Medical College Hospital, who was suffering from diarrhœa, Lewis detected nine nematoid worms, in a state of great activity, on a single slide. They were similar to those observed in chylous urine in March, 1870. Specimens were sent to Dr. Parkes, who, with Mr. Busk, expressed an opinion that they belonged to filariæ: it had not hitherto been known that they were hæmatozoa. The name "Filaria sanguinis hominis" was given to them. Further examination of cases of chyluria proved that both in the blood and in the urine the filariæ were to be found, and also in morbid secretions. For example, in a case where chyluria was associated with granular eyelids and inflammation of the eyes, giving rise to a milky secretion from the corners of the eyelids, filariæ were found in the exudation.

Lewis gives a rough estimate of the number of filariæ at 140,000, being an allowance of two individuals in each drop of the ten pounds of blood possessed by a person of one hundred pounds weight. This, if the parasites pervade the whole blood, as they probably do, is, I should think, considerably below the mark.

The creature is very minute, and apt to be overlooked without long, careful, and patient examination. The power employed should be sufficiently high to define a red blood-globule. The diameter of filaria sanguinis hominis is about $\frac{1}{175}$ in. Some are larger, some smaller: the largest is $\frac{1}{125}$ by $\frac{1}{3}$ in.; the smallest $\frac{1}{250}$ by $\frac{1}{125}$ in.

Filaria sanguinis hominis belongs to a family that includes many other entozoa prejudicial to man and animals—ascaris, oxyuris, dochmius, speiroptera, anguillula (the diarrhœa worm of Cochin China), dracunculus, trichina. It is allied to the two last mentioned, and their larval forms are somewhat alike, though perfectly distinguishable. During the first few hours "after removal from the body the filaria is in constant motion, coiling and uncoiling itself, and lashing the blood-corpuscles about in all direction." It has the power of retracting the head and tail. When recent it is smooth and transparent; some have a granular appearance; a spot, like an oral aperture, sometimes appears. As they become inactive they lose their transparency; if a little spirit be added they preserve their outline, otherwise they quickly disappear. They are capable of retreating within the delicate sheath by which they are surrounded. Under careful examination, an oral and an anal aperture, and an intestinal tube, can be made out.

The embryo being enclosed in a sheath, and having no visible boring apparatus, we may assume that its home is in the blood (or lymph), and that its movements are those of the circulation. With regard to the part taken by it in the production of disease, post-mortem evidence is much needed, not only with the view of determining what pathological changes take place, but of ascertaining the seat of the parent worm, and especially should search be made in and near the blood and lymph channels. Lewis describes the post-mortem appearances in the kidney thus: "It was more than usually lobulated, and on section several of the pyramids, especially near their apices, presented a smooth tallowy appearance suggestive of amyloid disease; no approach to the characteristic iodine reaction was obtained; translucent oil-like tubules, of a varicose appearance, were observed alongside of the uriniferous tubes, as if the vessels had been plugged." Boiling ether had no effect on them. No other morbid changes were found, but in every part of the kidney examined filariæ were found, as also on the branches of the renal artery, which were not, however, enlarged. The capillary vessels, from absence of good preparation, were not examined. Such is the course of the hæmatozoon into the urine. Worms of various sizes were found in the chylous urine, but no casts.

Chyluria is frequently associated with symptoms of other obscure diseases: diarrhœa, often of a persistent character, deafness, chronic ophthalmia. And here I may notice that in horses, and men too, in Africa and India, a filaria is occasionally found in the eyeball. I have several times seen horses blind from the presence of a living and moving nematode in the anterior chamber, which quickly induces corneal opacity. There are several other morbid conditions that I shall presently refer to.

The chyluria due probably to the stoppage and rupture of lymphatic vessels is doubtless very frequently associated with filaria; but we may not, I think, affirm that it is *always so caused*; other conditions may give rise to it. But in warm countries, or in cases of persons who have long resided in them, it is important to consider this probable origin, not only in chyluria, but in chronic diarrhœa, especially if associated with intermittent chyluria. It has been shown that the parasite may live for years without causing any very palpable derangement of health, and that it does not undergo any development as long as it remains in the circulation. It may continue an abiding source of disease, which under certain conditions will develop itself, and what these conditions are we now seek to learn. This is an important subject on which we seem likely to add to our knowledge.

There are others who share the honour of the discovery with Lewis. The literature of the subject is already extensive. I can only refer to some of those who have contributed to it. Dr. Cobbold, who has himself added so largely to our knowledge, not only on this but all else connected with helminthology, gives a list of authors.[2]

[1] Paper read at the Epidemiological Society, Feb. 5th, 1879.

[2] Wucherer, in Gaz. Med. da Bahia, Dec. 1868, and Sept. 1869, and in Hallier's Zeitschrift, 1869, and in Arch. de Méd. Navale, 1870; Salisbury, in Hay's Amer. Journ., 1868; Cobbold, in Brit. Med. Journ., July, 1872, and in Lectures on Helminth., 1872; in B. M. J., June, 1876; in THE LANCET for July and Oct. 1877; in Reports of the Proceedings of the Linnean Soc., of the Pathological Soc., of the Medical Society of London; in THE LANCET for March, in Nature of the same month, and in the Popular Science Review for April, 1878; Leuckart, Die Mensch. Par. Bd. II., 1876; Corré, Rev. des Sci. Nat., Sept. 1872; Crevaux, De l'Hématurie Chyleuse, &c., Paris, 1872; Silva-Lima (with Crevaux), Mem. sobre a Hematuria Chylosa on Gordurosa (Bahia, 1876), and in Gaz. Med. da Bahia, Sept. 1877, and in THE LANCET for March, 1878; Foncerrines, in Robin's Leçons, 1875; Lewis, on a Hæmatozoon in Human Blood, in Gov. Rep. for 1872, and separately (Calcutta, 1874), in Indian Annals, 1873, in Med. Press, 1873, in Lond. Med. Record (rep. by me), 1873, in Nature, 1873, and in his Memoir on the Path. Significance of the Nematode Hæmatozoa, Calcutta, 1874; see also Lewis's recent "Remarks regarding the Hæmatozoa found in the Stomach of Culex Mosquito," in Proceed. of the Asiatic Society of Bengal for March, 1878 (p. 89); Sonsino, Richerche Intorno, &c., in Rend. della R. Acad. di Napoli, 1874, and in Arch. Gén. de Méd., June, 1876; Araujo, in Arch d. Méd. Navale, 1875; Magalhães, P. S. de, in Gaz. M. da Bahia, 1877, and in O Progresso

In 1843 Klenke found worms in the blood of a person suffering from vertigo, but as he did not describe them exactly we cannot say if they were nematodes.

In 1868 (or 1866) the late Dr. Wucherer, of Bahia, published an account of a worm that he had detected in the urine of a person suffering from hæmato-chyluria. He found it when searching for bilharzia; and describes the minute nematodes as narrow at one and obtuse at the other extremity. He found them on subsequent examinations of chyluria, and they were always alive and active.

In 1868, Dr. Salisbury, in the United States, discovered a small entozoon in the bladder of a chylurious person. He described it as a new form, and called it Trichina cystica.

In July, 1870, Dr. Cobbold, F.R.S., found a minute nematode and eggs in the urine of a little girl from Natal, suffering from bilharzia. He says that though numbers of fluke's eggs were passed daily with much blood, it never occurred to him that the *nematode* was hæmatozoal. The child's parents had told him that she had passed three small worms by the urethra long before, and he assumed that they were of urinary origin. Had he, as he remarks, examined the blood from a finger, Lewis's important discovery of microscopic hæmatozoa might have been anticipated.

In or about 1872, several "finds" were made in foreign countries. I cannot detail them, but they will be found in Dr. Cobbold's interesting paper in the Proceedings of the Linnean Society, Oct. 1878, vol. xiv., No. 76, and in a paper in the *Veterinarian*, a translation of a memoir by Da Silva Lima, with appendix by Le Roy de Méricourt; also in the August and September numbers of *Archives de Médecine Navale*, by Bourel Roncière.

Up to 1872 the discoveries had reference only to the urine. In July, 1872, however, Lewis discovered the nematode in the blood under circumstances already described in a case of diarrhœa, and in the following October in that of a former chylurious person. The worms were identical. This very important discovery of the *blood stage* is, therefore, Lewis's, although the embryo had been discovered some time previously in the urine by Wucherer.

The parent worm was discovered still later by Dr. Bancroft in Australia. Thus we have separate discoveries of the different phases of filaria from widely distant quarters of the globe.

Dr. Manson, in China, ascertained that the mosquito is its intermediary host. To all much credit is due, and whether we call the parasite F. Wucherii, F. sanguinis hominis (Lewis), or F. Bancroftii, is unimportant. If the blood stage (which is by no means certain) be the most important phase of its genetic cycle, we may perhaps with advantage retain the Indian name; if the parent be the cause of most mischief, which may prove to be the case, then, perhaps, Bancroftii will be the most appropriate specific distinction. In any case, to each of these gentlemen is due the honour of a most important discovery.

To revert to the embryo. In 1874 Dr. Sonsino, in Egypt, when examining the blood of a young Egyptian Jew suffering from Bilharzia hæmaturia, detected a minute filarial embryo, which he was good enough to demonstrate to me in Cairo when I was there in 1876. I wrote a notice of it in THE LANCET as F. sang. hominis Egyptiaca. It seemed probable that it was a variety, but there is, I believe, no doubt that it is identical with Lewis's species. Sonsino has also discovered a filaria embryo in the blood of the horse and in the crow. He is adding and will add to our knowledge of the entozoa of that part of the world.

In 1875, Dr. O'Neill, on the south coast of Africa, found embryo nematodes in the exudation from the skin in a disease named by the negroes "craw-craw"; whilst Dr. Araujo detected it at Bahia in a negro suffering from the same disease; he called it "Filaria dermithemica." F. Dos Santos found it, *once only*, in the blood of a person suffering from elephantiasis, in Bahia. Dr. Crevaux detected it in chyluria, in Guadaloupe.

Certain free microscopic nematodes, very closely resembling each other, if not identical, have been found in the potable waters of Rio (Agua di Carioca) by Dr. Magalhaes. Their genetic relation with Filaria sanguinis hominis is not, I believe, quite established; but the indication is important, as it points to the channel through which the parasite may find entrance to the human body.

Dr. Manson, of Amoy, has discovered, what had been already suggested by Dr. Bancroft in Australia, that the hæmatozoa are passively transferred to the stomach of the mosquito, and he has described the transformation they there undergo. A new and important *rôle* for this already obnoxious insect has thus been revealed, the *full* import of which remains still to be ascertained. It appears that the mosquito has a peculiar facility for ingesting filariæ, as the blood taken from their stomachs contains more parasites than that in the person they have fed on. Manson says that the embryo, after entering the mosquito's stomach, retains for a short time the appearances which characterise it in the human blood. But after a few hours changes begin, a double outline of body and marked striation appear, and again disappear. This is the first stage in metamorphosis, and occupies about thirty-six hours. It now enters on a sort of chrysalis condition, in which, though quiescent, it changes in form. A four-lipped mouth and an intestinal tract become apparent about the fourth or fifth day. The subsequent details are difficult to trace, but it is now one-fortieth to one-thirtieth of an inch in length. It now completes the mosquito phase, and is very active, "moving about with great facility and rapidity in the water into which it has emerged, equipped for independent life."

Lewis also found embryos in mosquitos in Calcutta, and has described them in the *Bengal Asiatic Society's Journal* of March, 1878. He says that most of them came from pariah dogs, and they very closely resembled the human parasite. But he says that the mosquitos captured in a particular servant's house did contain human filariæ, and that he had the opportunity of observing all the stages of their growth; that whilst the stomach digests some, others perforate the walls of the stomach, pass out, and undergo developmental changes in the thoracic and abdominal tissues of the insect. He thinks that it will be found that Manson's observations apply to India, but he does not feel convinced that the mosquito is the only intermediary host. It may turn out to be so, but it is to be noted that even the most advanced stage hitherto seen is still a very immature one, no trace of reproductive organs being distinguishable.

Dr. Cobbold thinks we *have* sufficient information to establish the genetic relationship between filaria sanguinis hominis—the stomachal filaria of mosquito—and the sexually mature filaria Bancroftii: this name is given by Dr. Cobbold to the mature worm, in honour of its discoverer, who first found it in Australia in 1876, and sent specimens home, where they were verified by Drs. Cobbold and Roberts. Dr. Cobbold having detected, among specimens of microscopic hæmatozoa sent home by Bancroft, a single empty egg-covering, which corresponded with some he had observed in a Natal patient, suggested search for the parent, and Bancroft found it in a person suffering from lymphatic abscess of the arm in December, 1876. Lewis made further search, and on August 7th, 1877, found two specimens in the blood-clot from a young Bengalee lad who had been operated on for nævoid elephantiasis. Carter had also found it in India in 1876 in a lymphatic abscess of the arm and in hydrocele of spermatic cord. Drs. Araujo and F. Dos Santos, and others, also verified the discovery. Bancroft sent a specimen to Dr. Cobbold, who gave an account of their anatomy in THE LANCET of October, 1877, with figures. He only found the female, and gives the following dimensions: "Mature: length, 3½ in. Embryo: length, $\frac{1}{4\frac{1}{2}}$ to $\frac{1}{3\frac{1}{2}}$ in.; breadth, $\frac{1}{75\cdot5}$ to $\frac{1}{114\cdot3}$ in. Body capillary, smooth, uniform in thickness; head with a simple circular mouth, destitute of papillæ; neck narrow, about one-third of the width of the body; tail of female simple, bluntly pointed; reproductive outlet close to the head; anus immediately above the tip of the tail." A number of ova and embryos escaped from a mature worm during examination. Lewis also gave a description (and figures) in THE LANCET of Sept. 19th, 1878, which very closely corresponds with that by Dr. Cobbold, and says: "It is possible that when the parasite discovered by Dr. Bancroft has been more definitely

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Medico for Dec. 1877; O'Neill, on Craw-craw, in THE LANCET, Feb. 1875; Bourel-Roncière, in Arch. de Méd. Navale, March, 1878 (see Araujo); Manson, Report on Hæmatozoa, in the 6th part of the Customs Gazette, Shanghae, 1877, and rep. in Med. Times and Gazette, also additional cases in M. T. and G. for March, 1878, also (in a joint communication with me) in rep. of the proceedings of the Med. Soc. of London, in THE LANCET, March 30th, 1878; Le Roy de Méricourt, in Appendix to Nouvelle Phase de la question relative à la Nature Parasitaire de la Chylurie (Découverte du Représentant Adulte de la Filaire de Wücherer), being a translation of Silva Lima's Memoir, quoted above (Arch. de Méd. Navale, Dec. 1877). See also translations, with additions, in the Veterinarian for Feb. 1878; Araujo, A. J. P. da S., Memoria sobre a Filariose, &c. (Bahia, 1875); see also Bourel-Roncière's Analysis of and Commentary upon the Writings of Silva Lima and Silva Araujo in the Archives above quoted; Santos F. dos, in Gaz. Med. da Bahia for March, 1877; Moura, J. de, Thèse de Concours, 1877.

described, and its anatomy investigated, it may become evident that it is identical with the filaria sanguinis hominis." Of this I imagine there is now little, if any, doubt. I should add that Lewis noticed that the embryos that escaped from the mature worm detected in the blood-clot of nævoid elephantiasis were identical with embryos found in the blood of other parts of the body.

As regards the mode of entry into the human body, Manson says, speaking of the embryo, *after* it has left the mosquito, and escaped into water, "It is through this medium brought into contact with the tissues of man, and thus, either by piercing the integument, or, what is more probable, being swallowed, it works its way through the alimentary canal to its final resting place; arrived there, its development is perfected, fecundation is effected, and finally the embryo filariæ we meet with in the blood are discharged in successive swarms and in countless numbers. In this way the genetic cycle is completed." With regard to a boring apparatus, Manson says, "I cannot say if the three or four papillæ round one extremity of the developed embryo constitute the perfected boring apparatus of the worm, or if it is a boring apparatus at all; but comparing this with what is found in other species, I think it very probable that it either is or will become the piercing apparatus."

I cannot dwell longer on these details. They will be found in full in Dr. Manson's excellent paper in the Linnean Society's Journal, No. 75, vol. xiv.

I would just remark that whilst this is probably the right interpretation of what takes place, it cannot be regarded as perfectly established until further observation shall have confirmed the facts. This much, however, may be regarded as certain:—The embryo filariæ may swarm in the blood, and be associated with, or give rise to, certain morbid conditions. They pass into the mosquito, or it may be into other intermediary hosts, where they undergo developmental changes in the tissues of the insect, and are at length set free in the water, along with the larvæ. We cannot actually trace them further as they pass into man, but we have good grounds for believing that they do so through the medium of water; nor can we follow them through the further developmental changes that result in sexual maturity, though we know that the fully developed worm finds its home in the tissues of man, and then sheds its embryos into the circulating blood. How much, and in what proportion, the diseased conditions that result from their presence are due to the embryo, how much to the parent worm, we are still unable to say, but we have good ground for believing that post-mortem examination will soon throw light on the subject, and on the precise localisation of the parent worm.

(To be concluded.)

PIEDRA, TRICHOREXIS NODOSA, TINEA NODOSA.

A CONTRIBUTION TO THE PATHOLOGY OF CERTAIN AFFECTIONS OF THE HAIR.

BY W. B. CHEADLE, M.D., F.R.C.P.,
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AND
MALCOLM MORRIS, M.R.C.S.,
LATE CLINICAL ASSISTANT HOSPITAL FOR DISEASES OF THE SKIN, BLACKFRIARS.

A MORBID condition of the hair, characterised by nodular swellings of the shaft and brush-like splitting of the free extremity, formed the subject of some discussion in THE LANCET a short time ago under the head of "Piedra." The exact pathology of the affection was not, however, finally settled by the mutual agreement of the different observers. By some the disease was judged to be parasitic, while others failed to find any evidence of fungoid invasion; and even those who discovered a parasite described its relation to the hair in widely different terms. There arose also the further question whether the disease seen in this country was identical with the piedra of Columbia, or the German trichorexis nodosa, or an affection distinct from either.

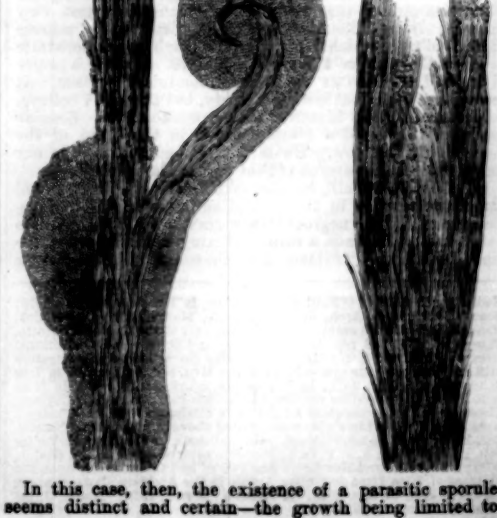
The specimens of diseased hair which we first examined, and of which we gave a short account previously, exhibited striking features deserving of more detailed description. They were taken from the moustache of a young man of twenty-five, and found in that and the beard only, not on the scalp. To the naked eye the hair appeared thickened and rough, with some encrusting material, and here and there nodular swellings. Numbers of them were broken off short, and the shafts could be seen to be split longitudinally for some distance from the free end, where the fibrils separated in a brush-like manner. These hairs were not easily extracted, but as firmly fixed in the follicles as in the healthy state. There was no sign of disease affecting the hair-follicle, or in any portion of the skin itself.

On examining the individual hairs under the microscope with a low power, the roughness and thickening were seen to be due partly to an irregular incrustation of granular-looking material round the shaft, and external to it, and partly to the swelling of the shaft itself by the incipient separation of the fibre-cells of the cortex. In some places the splitting and incrustation occur together; in others the incrustation is seen alone, the shaft being intact, although somewhat cloudy and opaque. The incrustation increases towards the free broken extremity, near which point it reaches its maximum development.

The fibrils of the split ends are in some instances simply spread out straight, like those disorganised by advanced ringworm, in others coiled and twisted, or interwoven in loops.

In one specimen—that represented in the woodcut—a splinter is curiously recurved, the adherent outside crusting curling round with it, and completing its crozier-like form.

With a higher power, such as Ross's ¼-inch objective, and more distinctly still with $\frac{1}{12}$ immersion lens, the incrustation, which appeared merely granular with the low power, is seen to be actually composed of an agglomeration of minute spherical light refracting bodies of uniform size, having all the characters of the sporules of a vegetable parasite. They resemble those of tinea tonsurans, but are larger. The sporules for the most part adhere in masses, having very much the appearance of a fish's roe. Here and there a few may be seen lying singly, or scattered about in small groups. As a rule, none can be distinguished within the shaft of the hair, either in the cortex or medulla, even when the hair exhibits the process of splitting already commencing. When, however, the fibrillar disintegration is more advanced, a few spore-like bodies are observed clinging to the fibrils, or more rarely lodged in the interstices between them. The roe-like masses of sporules, their adhesion to the cortex, and the scattered cells in the brush-like portion, are accurately shown in the accompanying excellent woodcut by Mr. Noble Smith.



In this case, then, the existence of a parasitic sporule seems distinct and certain—the growth being limited to

the shaft and free extremity of the hair, and not arising from, or, indeed, affecting, the root or follicle in any way—as in tinea tonsurans, or, as has been described, but as we have never been able to find, in sycosis. For a second specimen of a form of disease of the hair-shaft we are indebted to the courtesy of Dr. Stanislaus Poniklo, Assistant Professor of Pathology in the University of Cracow. Dr. Poniklo, in forwarding the specimens, states that they were taken from the moustache of a man aged forty, that he has been unable to satisfy himself of the presence of any fungoid elements, and that the morbid condition appeared to him to correspond with the trichorexis nodosa of the German pathologists. On examining these hairs we find in many regular and symmetrical cone-like enlargements of the shaft, and in some brush-like splitting of the ends. There is, however, no incrustation of the shaft, no masses of cells adhering to the outer cortex. The cortical nodes are seen under the microscope to be due to the separation of the fibre cells of the cortex, and their rupture at the point of greatest tension, the greatest curvature. But the most careful scrutiny fails to detect sporules or mycelium of fungus, either in the hair-shaft itself or adherent to its exterior. We may now compare these conditions with those previously recorded by other observers.

Kaposi, in vol. iii. of Hebra's work on "Diseases of the Skin," mentions, among other affections of the hair, one that occurs in the form of nodes, for which he proposes the name of Trichorexis nodosa. He says they are found on the hairs of the beard and moustache, as transparent or glistening conical swellings, occurring at intervals, like pearls on a string. On close inspection the nodes are found to belong to the hairs. Under the microscope, the following conditions are found to occur with the greatest regularity:—1. A node corresponds to a simple spindle-shaped swelling of the shaft of the hair. Or, 2. In the centre of the spindle-shaped swelling the medulla of the hair itself is swollen out in the form of a spindle. 3. At another part, the node has burst in such a manner that at the seat of the greatest curvature of the conical swelling the cortical substance of the hair has given way, and the spindle-shaped cells of the lower half of the cone project free upward and outwards, whilst those of the upper half look downwards and outwards; so that they are therefore placed one against the other ruggedly, like two besoms, the twigs of each of which have been thrust amongst those of the other, and whose extreme outline in section would form a rhombus. 4. A hair which appears to be terminated by a conical swelling shows microscopically a besom-like end, and this terminal splitting up represents the lower half, as described, of a conical swelling, which had previously been situated in the continuity of the hair-shaft, and at which this had broken short off. 5. The fibres of the terminal and central tufts consist of the granular spindle-shaped cells of the cortical substance of the shaft of the hair. 6. There is no trace of any fungus to be seen.

After this careful description of the pathology, Kaposi goes on to say that he cannot assign any cause for the swelling and splitting of the hair, but mentions the fact that Beigel, who wrote on "Swelling and Bursting of the Hairs," 1855, is of opinion that gas is possibly developed in the medullary substance, which at first is itself swollen out and burst by it, and that then the cortical substance is similarly affected.

Dr. Wilks, in his work on Pathology, describes a condition almost identical with the trichorexis nodosa of Kaposi. In a letter published during the discussion on the subject, Dr. Wilks states that he now believes the disease to be parasitic, but he does not give any reasons for his change of opinion.

Dr. Tilbury Fox, in the third edition of his work on Diseases of the Skin, mentions in a few words, under the head of Sycosis, a fungous disease of the hair. He says, "it is due to a fungus getting into the root and developing in the shaft after being carried some distance along it." The other condition mentioned in the same paragraph, in which "badly-nourished hairs break off and split up into fibres," probably corresponds to trichorexis nodosa and Dr. Wilks's cases.

M. Desenne read before the Académie des Sciences a description of piedra, a disease of the hair seen only in Columbia. It occurs in small nodosities visible to the naked eye, and as hard as stone, resisting and even turning the edge of a scalpel. M. Desenne is of opinion that the nodosities are composed of fungous elements. He was unable to find any trace of fungus in the substance of the hair itself.

It will be seen, then, that while the morbid appearances exhibited in the second case correspond with those described by Kaposi, Beigel, and Wilks, as trichorexis nodosa, those observed in the first case, and figured in the woodcut, differ from previously described pathological conditions in several essential particulars. 1. They differ from the so-called trichorexis nosoda in the presence of parasitic growth in the incrustation of the shaft, by roe-like masses of sporules, and in the absence of multiple symmetrical nodosities. 2. From the affection described by Dr. Tilbury Fox as a variety of sycosis, in the limitation of the fungoid elements to the shaft and to its exterior, the root and interior of the shaft being free, by the agglomeration of the sporules into roe-like masses, and, above all, by the absence of any sign of affection of the air-follicle itself or of the adjoining skin. 3. From piedra in the softness of the nodosities, compared with the stony hardness characteristic of that disease.

There would appear, then, to be at least three distinct forms of disease of the hair characterised by nodular enlargement and splitting—viz., the piedra of Columbia, the trichorexis nodosa of the Germans, and a parasitic affection which might, perhaps, be termed tinea nodosa.

GLIOMA RETINÆ; EXCISION OF EYE; NO RECURRENCE OF DISEASE AFTER TWO YEARS.

BY FRANK H. HODGES, F.R.C.S. ED.,
OPHTHALMIC SURGEON TO THE LEICESTER INFIRMARY.

NELLIE A——, aged four, was brought to me on July 19th, 1876. Six weeks previously her mother had noticed a yellowish body within the pupil of the left eye, which she then discovered to be blind. I found the pupil somewhat larger than its fellow, and inactive; slight ciliary congestion and lachrymation, but no pain; tension + (?). On looking into the eye the media, including lens, were seen to be quite clear; and, on patient looking downwards and inwards, an opaque, yellowish body, having very much the appearance of wash-leather, and traversed by numerous fine vessels, was seen. This body had a concave, cupped appearance, and seemed to be separated into two by the vessels, the smaller portion of the tumour being above them. I diagnosed glioma, and advised immediate excision. Dr. Tayl..., of Nottingham, saw the case the following day, and wrote to me: "This is clearly a case of glioma, and I should extirpate at once."

On July 25th I excised the eye in the usual manner, dividing the nerve as close to the orbit as possible.

Mr. Priestley Smith, of Birmingham, kindly microscopically examined the tumour for me, and his report is as follows:—"The globe, having been for some time in absolute alcohol, is considerably shrunken, and the sclera is drawn inwards in places, so as to lose its spherical form. The whole of the vitreous chamber is filled with a solid, white, brain-like mass, which under the microscope exhibits the structure of glioma—namely, small round cells of uniform size, with little if any intercellular substance. The extent to which the new growth has compressed the structures which limit its extension, and apparently without invading them, is very remarkable. An anterior chamber is entirely wanting. The lens is flattened to about one-third of its normal thickness, and is adherent throughout the area of the pupil to the posterior surface of the cornea. In several sections through these structures the anterior capsule, with some lens fibres attached, was torn away from the body of the lens, and remained adherent to the cornea. The iris is tightly compressed between the cornea and lens, and is in some parts, if not universally, adherent to both structures. The position of the ciliary processes is just revealed by a slight thickening of the black line representing the iris and choroid, in which can be discerned, by manipulating the cover-glass, the greatly flattened apices of the ciliary processes. The equator of the lens is compressed, so as to form a very acute angle. The suspensory ligament is entire and limits anteriorly the extension of the morbid growth. Elsewhere the tumour appears to be limited by the at-

tenuated choroid and by the optic disc. The optic nerve, 4 mm. long, appears quite healthy."

The results of excision of the globe for glioma, even when performed at an early period of the disease, are not encouraging. Usually an arrest of the disease for a few months only is gained; then recurrence ensues in the divided optic nerve, and rapidly proves fatal. Sir William Jenner has narrated, in his graphic manner, a case of laryngeal diphtheria in which life was saved by tracheotomy. And he remarks, that were the operation to fail a thousand times, he should still feel justified in recommending it in similar conditions; and more especially as a painless death—asthenia—is substituted for a distressing one, slow suffocation. I think the same arguments may be forcibly applied to cases of glioma retinæ; for, even if extirpation fails to save life, it will invariably relieve the patient from much terrible suffering.

Leicester.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

DIABETES; CASES OF DEATH BY SO-CALLED ACETONÆMIA; CLINICAL REMARKS.

(Under the care of Dr. REGINALD SOUTHEY.)

DIABETES is a disease of which the diagnosis is usually easy, although the physiology is a very intricate problem. Two cases in which some uncertainty regarding diagnosis existed before death have lately come under Dr. Southey's care in the hospital, and are sufficiently interesting to merit attention.

CASE 1.—Ed. W——, aged forty-four, travelled up from Sheerness on July 6th, 1877, to St. Bartholomew's Hospital, for advice upon indigestion. He was seen by Dr. Gee, who found him so exhausted, cold, and feeble, that he at once admitted him into Luke ward. He was a sallow, emaciated man, with a dry rough skin and dry furred tongue. The heart-sounds were loud and clear, the respiration shallow and feeble. There were no physical signs of lung catarrh, or evidence of lung disease. Sugar had been noticed in his urine, and he acknowledged some polyuria. On July 8th a sample of his urine was examined, which was of sp. gr. 1013, alkaline, straw-coloured, and contained no signs of albumen. Absence of sugar was given as a fact by the house-physician, Mr. Darbishire.

At about 4 o'clock on the morning of the 9th of July the patient's breathing attracted the notice of the night-nurse; it was noisy and laboured. He got up and went to the closet, and seemed semi-delirious and strange. The house-physician was sent for, and found him at 5 A.M. breathing loudly and stertorously, the respiration being 23 per minute; pulse 106, rather empty, but regular. The heart-sounds were clear. He was not unconscious, but obfuscated, roused when spoken to loudly, but did not remember where he was or what he had been doing. His feet and hands were cold; his pupils acted to light, and the conjunctivæ were sensitive; lips rather blue.

Some ether and ammonia was administered, and, as this did not affect him much, the inhalation of a few drops of nitrite of amyl was essayed; under this he roused up, answered questions better, and said he was in no pain, that he felt all right in himself, and that he had never been taken queer in this manner before. The previous twenty-four hours' urine had been collected; it was acid, clear, straw-coloured, with a specific gravity of 1034, and contained 1·8 per cent. of urea (total, 33·84 grms.) and 12·5 per cent. of sugar (equal to 235 grms.)

Between 8 A.M. and 10 P.M. on July 9th the patient did not pass a drop of urine, and at the latter hour there was none accumulated in his bladder. He had taken milk, beef-tea, and fluid nourishment in small quantity throughout the day. His bowels had not acted, and an enema which had been given had been returned unaltered.

Throughout July 9th and 10th he remained in a soporous condition, sleeping and breathing heavily, 28 per minute, with blue lips, having cold extremities, and a feeble but regular pulse, 72. For some time he could be roused to take nourishment, then he became profoundly comatose, breathing almost stertorously. Still there were spontaneous movements of his limbs until shortly before his death, and no paralysis was noticed, and probably none existed. The breathing stopped suddenly about 3 P.M., July 10th. No post-mortem examination allowed.

CASE 2.—Honore H——, aged eleven, a patient of Dr. Slyman, of Camden-town, a delicate, emaciated-looking child, under care for badly broken chilblains, was found to be so ill and weak in December, 1878, that a close inquiry was made about her urinary functions, and the urine was found to contain no inconsiderable amount of sugar. The mother had noticed nothing about the child before Dec. 14th, when she had some sickness; but from about this date, at all events, the patient had had frequent micturition, making water about twelve times by day and three times by night. She had also drunk water excessively, and had very often vomited. She was dieted strictly, but as it was not so easy to enforce or carry out the instructions at the patient's house, she was admitted into the hospital on Jan. 3rd last. In addition to her antidiabetic diet, she was ordered a pill containing small doses of belladonna and opium.

As soon as twenty-four hours' urine could be collected, Mr. Heath set about estimating the amount of sugar by the fermentation test. The average quantity passed between Jan. 3rd and Jan. 6th was about five pints per twenty-four hours; sp. gr. 1035. After fermentation with addition of yeast the sp. gr. was reduced to 1010, so the sugar was estimated roughly at about 25 grains per ounce; therefore 100 fluid ounces would contain 2500 grains, or 5 oz. 10 gr. of sugar per diem.

For the first two days after her admission she took a fair amount of nourishment, and was kept warm in bed; still she was very frequently sick. On Jan. 5th she took very little nourishment all day, and was not thought so well. She complained of a good deal of pain at times in her stomach. During the night between the 5th and 6th she became delirious. At midday of the 6th her pulse, which had been 132 and very feeble in the morning, was scarcely to be felt or counted; her respiration was 48, and her breath was cold; temperature 97·8°. She looked livid and collapsed, lay in a semi-conscious state, from which she could only be momentarily aroused. She could hear and partly understand what was said to her, but answered incorrectly and apathetically. Her condition betokened death by acetonæmia, formerly called glycosæmia or saccharæmia. Nutrient enemata were given her every three hours, and a draught of aromatic spirits of ammonia, with tincture of capsicum, in camphor-water, every three hours. She was placed at once in as hot a bath as she could bear. After the hot bath and three nutrient enemata she rallied a little. At 2 P.M., Jan. 6th, the pulse could be counted again at the wrist, and she kept a little milk on her stomach. There was no further vomiting after 8 P.M. on the 6th. Her abdomen was slightly tender on pressure; tongue dry and furred. Only two pints and a half of urine were passed between Jan. 6th and Jan. 7th. This was very acid, turbid, yellow-brown coloured, and contained a trace of albumen (one-tenth). There was a suspicion that some tea had been vomited into the vessel containing it. During the night (7th and 8th) she passed into a more profound coma, from which she could not be roused to take anything, and died at 3 A.M. of the 8th without any struggle or convulsion.

The necropsy showed great emaciation. Broken chilblains on right heel and toes of left foot. The skin was harsh. There were two ecchymoses about the size of a crown-piece upon left tibia. The mucous membrane of the tonsils, larynx, and epiglottis was swollen and œdematous as far as vocal cords, not further down trachea. There was an appearance of tonsillitis on right tonsil, and some enlargement of the cervical glands on right side of neck. The lungs were collapsed naturally, were blood-filled, but not œdematous; they were not diseased. The heart was small, its muscular structure was healthy under microscope. The right ventricle was extremely thin, and the right auricle like thick brown paper. The liver and spleen were normal to all appearance. The kidneys were firm, tough, and congested in area vasculosa. The intestines were normal

throughout, as also mesenteric glands. The stomach (which will be preserved in the hospital museum) presented purpuric dottings, or tiny ecchymoses, about the size of pins'-heads, upon its mucous membrane, and one spot upon its serous surface of the size of a bean. The interior of the stomach contained blood-stained mucus adhering to its surface over a large patch, and altogether this viscus presented appearances not unlike those sometimes provoked by irritant poisons. The brain was examined minutely, and nothing abnormal found in it.

Remarks by Dr. SOUTHEY.—These two cases were undoubted examples of diabetes. They both died with these symptoms in common—cyanosis, sudden chest oppression, restlessness, peculiar delirium, coma. Some journey, exertion, or agitation had shortly preceded the graver symptoms, particularly noticeable in a case I saw last summer, of which the following were the main features:—I received an urgent call to a patient who was taken suddenly seriously ill. She was a young married woman of thirty-three or thirty-four, who had come up from the country the previous day to some of her husband's relatives, to do some shopping in town. She had had children, but none recently, was thin, delicate, and liable to bronchitis, but she had never been laid up before with any serious illness. She was not known to have made water frequently, or to have been ailing. The history of her illness was that she had come home the previous day exhausted by her journey up and her shopping, had taken very little food, and complained of sudden great pain in her side (right?) Her breathing was oppressed, noisy, and very hurried; she was restless, tossed her arms about, complained of want of breath, wanted more air, and her lips were very blue. The heart acted loudly, but with feeble impulse; her pulse was small and very feeble, scarcely to be felt at wrist. No diagnosis, at least none that could be accredited as more than a guess in the dark, had been arrived at as to the nature of her malady. Because she was thin, had had previous coughs and colds, and could not be thought robust, it was open to inference that she might be consumptive. Seized as she had been with sudden epigastric or diaphragmatic pain—upper thoracic it might be called—it was not out of reason to surmise that she might have congestion of the lungs. Her laboured breath and cyanosis favoured this idea. Embolism of the pulmonary artery was, or rather had been, suggested. Perforated ulcer of the stomach would have been quite as likely a guess. There was no sweet-hay or diabetic halitus in the breath. There had been no profuse urination since she had fallen under astute medical observation; her tongue was not beefy red, nor was it livid like her lips; but she was manifestly dying, lying in that peculiar indifferent state to her own breathlessness which, with blood so ill-aerated and brain-functions so imperfectly fulfilled, although intelligence was not wholly abrogated, betokened the final surcease neither distantly nor uncertainly. There had been little urine secreted, but there was no anasarca. The mental capacity, of which flickerings came back under the excitement of an interview with another doctor, put uræmic delirium or sopor out of the question. Her restlessness, her untidy, uncomfortable posture in the bed, and apathy, might have suggested delirium tremens or alcoholic mania; but she was rational when recalled to faculty consciousness, and there was no tremulousness of hands or tongue, no busy-minded delirium, no interlinking of fact with fiction in her account of herself to me, to make me think she was or had been tipsy; neither was her countenance that of a drunkard. I thought of my recent patient W——, and put the facts together. A peculiar soporous condition, with dry tongue and cyanosis; not hurried breathing, but pulmonary blood-stasis; no evidence of lung consolidation; no dulness; noisy, stertorous, apoplectic-like breathing, but no paralysis; intellectual capacity retained, but exercised only under strenuous and unwilling effort. So I pronounced my verdict "acetonæmia," and directed the urine to be drawn off and examined for sugar. This was found. The woman died, and the history elicited of previous polyuria tallied with diabetes, short and severe, but quite unrecognised beforehand.

In this case, as in the two others, after a brief period of delirium, the patient passed into a somnolent stage, and breathed stertorously, and then after a few hours died. Kussmaul, writing about diabetes,[1] was the first observer to direct attention to this particular mode of death in diabetes, which he has termed acetonæmia. The symptoms he calls attention to were forthcoming, in order and exactitude as he described them, in my cases: sudden oppression in the chest; pain in the epigastrium, as if there was some obstacle to breathing; "gewaltigen und meist beschleunigten Respirations-bewegungen"; violent, and for the most part hurried, respiratory acts; accelerated heart's action; and rapid coma, which lasts till death. He points out in what particulars the condition resembles, and how it may be distinguished from, uræmia. After what I have said, there should be no further need for me to do this; but let me add that I am quite uncertain myself what the nature of the blood-change is that leads to these clinical phenomena. It may be acetone in the blood. Petters has stated that large doses of this substance administered to animals provoke death with similar symptoms. But if the peculiar sweet-hay halitus of diabetes be due to acetone in the blood, I can only tell you that in these three cases, when the respiratory symptoms appeared, the diabetic halitus was, to my sense of smell, wholly absent from the breath. Wherefore is the arrest of its excretion in the breath the cause of its accumulation in the blood? or may it be that the sudden increase of its quantity in the blood arrests the respiratory circulation and chemical interchanges?

[1] Deutsch. Archiv f. Klin. Med., xiv., Heft I., 8.

GLASGOW ROYAL INFIRMARY.

LARGE IRREDUCIBLE INGUINAL HERNIA IN A FEMALE; RADICAL CURE; ACCIDENTAL FORMATION OF A FÆCAL FISTULA; PERFECT RECOVERY.

(Under the care of Dr. DUNLOP.)

FOR the following notes we are indebted to Mr. Alfred Peterkin, M.A., M.B., C.M., house-surgeon.

Mrs. S——, aged forty-five, housewife, was admitted to Ward 23 on July 22nd, 1878, with a large inguinal hernia of twenty years' standing, and with symptoms of strangulation. She stated that twenty years ago she first observed a small tumour in the right groin, about the size of a walnut. For some years this slowly increased until about twelve years ago, when it rapidly enlarged and became very painful. About this time she was confined of a child, and shortly afterwards an abscess formed over the tumour, which was poulticed and allowed to burst, discharging a large quantity of stinking pus. Soon after this a second hernia seemed to come down nearer the pubes, but this she was always able to return. A fortnight before admission the pain became extreme and vomiting set in, which, with intermissions, continued increasing in severity till her admission.

On admission the tumour was found to extend for more than twelve inches along the line of the right groin, from close to the right labium to beyond the anterior superior spine of the ilium, having an average breadth of from five to six inches. A constriction one-third of the length from the pubes seemed to divide the tumour into two separate herniæ.

In the absence of Dr. Dunlop, the patient was seen by Mr. H. E. Clarke, and he, not deeming it a case for immediate operation, confined himself to getting the bowels freely opened by means of enemata and castor oil. At this time the vomiting was still present, but neither continuous nor stercoraceous. After admission the patient began to improve, the pain and vomiting becoming gradually less. When the patient seemed somewhat restored to health, Dr. Dunlop determined, after consultation, to operate, and ease the woman of a burden that for many years had made life unendurable.

On Aug. 4th, the patient being brought deeply under the influence of chloroform, Dr. Dunlop made an incision along the tumour about a foot in length. On opening the sac the hernia was found to come through the external abdominal ring, and to consist of large and small intestines, with the caput cæcum coli and vermiform appendage. The inner third was easily reducible, but the external two-thirds was found to be strongly adherent to the peritoneum, and to be irreducible. These adhesions being broken down, the bowel was still irreducible from the quantity of gas contained in it. To remedy this, the bowel was twice punctured with the aspirator, but even then the external ring had to be considerably enlarged in an upward direction before the bowel could be returned. By means of Wood's needle, silver wire was used to bring the edges of the ring together, the ends being brought out and tied firmly over a large pad. By this

means the inguinal canal and the external ring were both compressed. The superfluous skin being then removed, the external wound was stitched and dressed, the whole operation having been conducted under carbolic spray, and with the usual antiseptic precautions. A quarter grain of morphia suppository was ordered to be given every four hours. Next day the wound was easy, but there was considerable nausea, with vomiting of mucous matter. The nausea ceased towards evening. She had slept well, and both pulse and temperature were normal.

On Aug. 7th the wound was dressed for the first time. The incision looked well, but there was slight bagging of pus at external corner.

The wound was thenceforth dressed every two days till the 14th, when the stitches and pads were removed, the wound being healed except a small portion at the inner and outer extremities. When the deep stitches were removed, a slight seemingly feculent discharge was observed coming from one of the punctures; due, probably, to the non-closure of the openings made by the aspirator in the bowel. The intestines were found to be kept in position, showing that the deep stitches had taken effect.

The discharge increased in quantity on August 15th, 16th, and 17th, but was without any smell, though otherwise like fæces. The absence of smell being possibly due to the deodorant properties of the carbolic acid, some doubt remained as to whether fæces were coming by the aperture or not. For this reason the antiseptic dressing was continued. During these three days several motions were passed per rectum.

On August 18th no reasonable doubt remained as to the feculent character of the discharge. Plain boracic dressing was substituted for the antiseptic one, the discharge at this time being rather less than previously.

On August 19th the discharge of fæces by wound was still less, and on the 20th it had stopped, though a little pus came from the wounds made by the sutures.

On Aug. 21st there was no fæcal discharge, but on pressure being made over the abdomen, small bubbles of gas made their exit by the wound, showing that the wound in the bowel had not yet closed. The bowels were moved during the morning naturally for the first time for three days.

On Aug. 23rd fæces and gas escaped by the groin, and continued to do so till the 26th, when they stopped, and did not return till Sept. 3rd, when fæces appeared again. From this date the discharge of fæces from the groin was controlled by keeping the bowels freely open, the discharge immediately appearing on the bowels becoming costive.

On Sept. 20th she was dismissed, wearing a truss, and with no fæces coming by groin, but a slight amount of pus.

On Nov. 1st the patient returned to show herself. Health better than for many years. The wound was closed, and there was no discharge whatever.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

Diagnosis of Congenital Heart Disease.

AT the meeting on January 27th—Mr. Erasmus Wilson, President, in the chair—Dr. R. J. LEE exhibited an improved form of Steam Draft Inhaler, constructed on the same principle as one he showed in 1876,—a jet of steam propelling air along a tube of small size in connexion with the fluid intended to be vaporised. It had been successfully used in cases of whooping-cough, laryngitis, croup, &c. Several members spoke in praise of the instrument.

A paper was then read by Dr. SANSOM on the "Diagnosis of Congenital Disease of the Heart in Children." From experience at the North-Eastern Hospital for Children the author estimated the frequency of manifestations of heart disease in children under twelve years of age as about three in 500 cases. An analysis of 130 cases of heart disease showed an increasing prevalence in childhood until the eleventh year. Of these cases fifteen were considered to be congenital. The most convenient classification of congenital cases for clinical purposes was believed to be the following:—1. Cases of cardiac anomaly presenting no murmurs. 2. Those with murmur not referable to the pulmonary artery. 3. Congenital anomaly with pulmonary murmur. 4. Complications with endocarditis. Cyanosis for the most part characterises these cases, but in some there may be no blueness, but pronounced anæmia. In cases of pulmonary stenosis in children it was pointed out that a systolic murmur generated in the pulmonary artery may nevertheless not be localised in the pulmonary area. It may be conducted to the right side and up the vessels. The explanation is that the pulmonary murmur is supplemented and reinforced by hæmic murmurs generated in the aorta and large arteries. Anæmic murmurs are by no means so uncommon in children of all ages; but they are particularly prone to affect children with malformation of the pulmonary artery. In some cases a loud venous hum is also manifest. The existence of cardiac anomaly predisposes to endocarditis, with the occurrence of valvular imperfections, but the diagnosis of lesions thus induced from those of rheumatic causation is very difficult. Rheumatic endocarditis in children may arise and progress very insidiously. The author concluded by formulating the following propositions:—1. In cases of congenital cyanosis in which no cardiac murmur is manifest there is probably patency of the foramen ovale. 2. In cases of cyanosis with murmur, varying in intervals, heard over the sternal ends of the third and fourth costal cartilages and intercostal space, there is probably patency of foramen ovale. 3. In cases of cyanosis with loud, unvarying, systolic murmur, with maximum intensity internal to the position of the apex-beat, but heard also at the back between the scapulæ, there is probably imperfection of the ventricular septum. 4. In cases of cyanosis and of marked *anæmia* in children who manifest a pronounced, superficial, systolic murmur at the base of the heart, there is probably constriction of the pulmonary artery or its orifice. Such murmur may be complicated by hæmic murmurs. 5. In cases of congenital affection of the heart, in which there is evidence of considerable dilatation of the left chambers, it is probable that endocarditis, affecting the valves, has constituted a complication.—Dr. SYMES THOMPSON had recently had two cases of congenital defect of the pulmonary orifice, in which the subjects lived beyond puberty.—Dr. R. J. LEE thought the character of the murmur gave but little or no aid in the diagnosis of heart disease in children. It was quite possible for the foramen ovale to increase in size, and the murmur to diminish in consequence; one of the chief factors in the production of congenital murmurs being the rigidity of the structures around the foramen. He regarded maternal impressions as of considerable importance in the etiology of these cases.—Dr. BOYD, from extensive post-mortem experience, argued that the mortality from heart disease was greater among female than male children.—Dr. DE H. HALL considered the statement made by Dr. Sansom, that pulmonary stenosis was frequently associated with tuberculosis of the lung, of great interest in view of the immunity from phthisis enjoyed by the subjects of other forms of heart disease, Niemeyer considering such immunity to be due to the lungs being gorged with blood, and consequently less prone to caseation. In pulmonary stenosis, on the contrary, the lungs are, of necessity, anæmic.—Dr. LEARED thought many cases of insidious heart disease in adults owed their origin to some congenital defect.—Dr. ALLCHIN said that the cases of congenital heart disease which last any time are those in which there is some compensatory lesion. In acquired valvular disease this does not occur to anything like the same extent. In reply to Dr. Fothergill he said, that a patent foramen ovale was an instance of compensatory lesion associated with pulmonary stenosis.—Dr. DAY mentioned two cases of extreme cyanosis without murmur.—Dr. SANSOM agreed with Dr. Symes Thompson that a longer duration of life was met with in pulmonary narrowing than in cases of communication between the two sides of the heart. In adults valvular disease of rheumatic origin may arise so insidiously that it would be impossible to differentiate such cases from those of congenital origin. He thought compensation more difficult in congenital defect than in acquired disease.

[The report of the meeting of the Pathological Society of London is deferred until next week.]

PROVINCIAL MEDICAL SOCIETIES.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.—At the meeting on December 17th, 1878, Professor Sanders in the chair. Dr. CADELL exhibited a female patient, with two children, boys, one eleven the other nine years of age. The elder was being nursed by his mother at the time she suckled a syphilitic baby, and then got the disease, but her child escaped. The younger boy was born after his mother became syphilitic, and showed the well-marked physiognomy of hereditary syphilis and interstitial keratitis. The mother, now in the ninth year of the disease, has the remains of an old pustular syphilide on her face, gummatous infiltration of both ears, and a well-marked gumma over the head of the right fibula. She had an infant who died at the age of six weeks, with a syphilitic liver weighing 12 oz.—Dr. HAMILTON showed a specimen of Chylous Urine and Lipæmia.—Dr. KIRK DUNCANSON showed for Mr. Benj. Bell an Eyeball, the seat of melanotic sarcoma, removed from a young married woman aged twenty-nine. The disease dated from twelve months, blindness and great pain coming on suddenly three weeks after the birth of a child. At that time subretinal hæmorrhage was observed on ophthalmoscopic examination. The eye remained quiet, with loss of sight, until about one month after the birth of another child, when intense pain in the eyeball and right side of head came on, and the eyeball was extirpated.—Professor ANNANDALE read a paper on "Strangulated Hernia reduced *en bloc*, relieved by Median Abdominal Incision." The bowel had been strangulated for three days. The operation was successful, but the patient having been allowed to get up and strain at stool ten hours after operation, death ensued in two days. Professor Annandale advised median abdominal incision in cases of umbilical hernia; and also the procedure of inversion of the patient in irreducible hernia generally.—Mr. Joseph Bell said that in one case of abdominal section for hernia he was able to examine all the hernial openings, even the obturators, through the abdominal incision. The late Dr. Sidey succeeded in reducing some cases of hernia by manipulation, when the patient was placed on her knees.—Dr. Carmichael cited a case.—Mr. G. DUNCAN read a paper "On a Case of Filaria Medinensis," met with in the foot of a Swedish sailor, who had worked barefooted in the hold of his vessel in the Persian Gulf ten months previously. The guinea-worm was over twenty-two inches long, and could be felt lying in the subcutaneous tissue all round the ankle. Suppuration had occurred for five or six inches around it, and the treatment consisted in weak carbolic dressings, and the gradual winding out of the worm from its position upon a piece of lint.—Dr. Hamilton, the President, Mr. Joseph Bell, and Mr. Annandale took part in the discussion.—Dr. CADELL read a letter from Mr. J. Husband, in India, giving an account of a case of a large tumour growing from the subcutaneous cellular tissue above the left clavicle, and depending in front of the abdomen. It weighed 8 lb. on removal, and was regarded by the President and Mr. Annandale as a form of elephantiasis.

CARDIFF MEDICAL SOCIETY.—At the annual meeting on Jan. 9th, 1879, Dr. Edwards, President, in the chair, the following officers were elected for 1879:—President: Dr. Paine. Vice-President: A. P. Fiddian, M.B. Honorary secretary and treasurer: Dr. Sheen. Other members of Committee: Messrs. Horder, Lougher, Dr. Vachell, and Dr. Buist. The report mentioned that seven ordinary and two special meetings had been held during the past year, the special referring to the question of club remuneration. The following cases and papers had been brought before the Society during the year:—Mr. Horder: Notes on New Remedies; Notes on Efficient Vaccination. Mr. Fiddian: A case of Abdominal Aneurism; the Aid of Wounded in time of War; a case of Scurvy from the use of Condensed Milk. Dr. Sheen: Case of Persistent Hiccough, lasting ten days, cured by Creasote; Cases of Diphtheria. Mr. Price: Clinical Therapeutics of Quinine. Dr. Vachell: Case of Perforating Ulcer of Stomach. Mr. Hardyman: Notes of a case of Diabetes. Dr. Taylor: Case of successful Removal of large Abdominal Tumour under Antiseptic Precautions. Dr. Edwards: Case of Sudden Death. Dr. Buist: Case of Hydrocele (?) complicated with enlarged Testis; some experience of Nitrite of Amyl in Asthma and Whooping-cough; and On Ourselves, our Patients, and our Clubs.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.—The fourth meeting for the session was held on December 6th. Mr. WM. MACEWEN read a paper on "Antiseptic Osteotomy for Knock-knees, Bow Legs, and Rickety Deformities," which was afterwards published in THE LANCET of December 28th. To illustrate the results of the operation he showed a dozen patients who had been operated on by himself. All the surgeons present, including Dr. Eben. Watson, Dr. Morton, Dr. Alexander Patterson, spoke in high terms of commendation of the operation.—Dr. Watson strongly urged the importance of keeping the limb unused for a proper period.—Dr. Morton suggested that section above the outer condyle would be preferable, on the grounds that it would bring down that condyle to the same horizontal plane as the inner, and that there was less risk of touching an artery.—Dr. Alexander Patterson showed a drawing of a case of extreme deformity in knock-knee, in which he had successfully operated. In this case the measurement from toe to toe had been twenty-five inches. Several of the members took part in the discussion.

The next meeting was held on December 20th. Mr. J. D. KENTON read notes on a case of Miner's Nystagmus, and showed the patient.—Dr. JAMES ADAMS read a paper on an Improved Apparatus for Inhaling Atomised Fluids. The apparatus was of his own contrivance, and is now well known as the "Adams" inhaler. The object of the paper was chiefly to show the evils inseparable from patents as applied to medical or surgical apparatus, and the impolicy, if not immorality, of medical men associating themselves with such patents with a view to gain.—Dr. JOHNSTON MACFIE read notes of a case of Fracture of the Neck of the Humerus simulating Dislocation. In the discussion which ensued no point of interest was elicited.

The sixth meeting was held on January 10th. Dr. JAS. COATS and Dr. GEO. S. MIDDLETON read a paper "Describing Secondary Sclerosis of the Brain and Spinal Cord," and illustrated it with numerous drawings and microscopic preparations taken from one case. It was a case of right hemiplegia due to the destruction of the left corpus striatum. The chief interest of the paper lay, perhaps, not so much in the tracing of the pathological changes down to the cord, as in the attempt to connect these changes with some of the symptoms during life. Thus the late rigidity of the muscles was plausibly connected with the isolation of the lower centres of the cord from the higher by the destructive lesion. On this point, however, Dr. Foulis was of opinion that mere want of use was adequate to account for the stiffening of the muscles; while Dr. Finlayson indicated his opinion that both explanations were inadmissible on the ground that if either of them were the true cause the phenomenon would occur in every case. In connexion with the case, the physician under whose charge the patient had been, gave an account of it from the clinical side.—In the discussion, Dr. McCall Anderson, Dr. G. Buchanan, and Mr. John Reid took part.

Reviews and Notices of Books.

The Famine Campaign in Southern India (Madras and Bombay Presidencies and Province of Mysore), 1876–1878. By WILLIAM DIGBY, Honorary Secretary of the Indian Famine Relief Fund. Two Vols. 8vo, pp. 515 and 491. Longmans, Green, and Co. 1878.

The Sanitary and Medical Aspects of the Famine of 1876–77. By Surgeon-Major W. R. CORNISH, F.R.C.S., Fellow of the Madras University, and Sanitary Commissioner for Madras. And *Notes on the Pathology of Famine Diseases.* By Surgeon-Major A. PORTER, M.D., Surgeon 4th District, Madras. Fcp., pp. 51. Madras: The Government Press. 1878.

[FIRST NOTICE.]

IT will be matter for serious regret if Mr. Digby's work does not receive the close attention which its subject deserves; and this not only on account of that subject, but also, and even more especially (paradoxical though this may seem), on account of the light it throws upon the method of government in India. The famine of 1876-78 in Southern and Western India was probably the gravest event which has befallen that country, in its social aspects, since

the occupation of India by the British. It was an event pre-eminently calling for, and peculiarly calculated to elicit, the highest qualities of government—qualities of a sort which it was popularly believed in this country the Indian Government, whether regarded in the Central Government or in the Governments of the several Presidencies, possessed in an excelling degree. Readers of Mr. Digby's book, which appears to be thoroughly impartial, and which is for the most part founded on official records, will be painfully undeceived in this respect. It shows the Madras Government, within which the famine first prominently declared itself, inadequately acquainted with the beginnings of the evil, and failing to apprehend the magnitude of the impending scourge until it had reached alarming proportions. Further, when that Government became aroused to a just sense of the disaster which had come upon the Presidency, and had communicated the facts to the Central Government—the Government of India, as officially so-called—it shows the latter distrustful of the information, discrediting the necessity of the measures which the Madras Government had adopted for relief in the famine-stricken districts, and, at a time when deaths from starvation were literally taking place by thousands, maintaining that the special measures of relief which the Madras Government had urged upon the Central Government were uncalled for, as but two or three deaths from starvation, according to its belief, had occurred. Following upon this attitude of the Central Government we have, as might be anticipated, an antagonism between the local and general Governments destructive of confidence and seriously injurious to efficient relief work. More; this antagonism displays an acrimony in correspondence between the local and central Governments which is not the least important of the lights thrown upon the method of Indian administration by the official facts of the famine. The acrimony is obviously no newly imported feature in the correspondence. It betrays the habit of a style of correspondence between the Central Government and the Presidential Governments which would render administration impracticable if indulged in between the Imperial Government and the several Administrations of the colonies, or between different departments of the Imperial Government, or between the British and foreign Governments. It is impossible to read the correspondence between the Central Government of India and the Presidential Governments without being convinced that the personal feelings and proclivities of senior officials have a part in them, which, according to notions of government entertained for home purposes, must be seriously detrimental to any general policy. A remarkable illustration of this kind of official procedure will be noted presently.

What happened with the Madras Government in its relations with the Government of India happened also with the Bombay Government, and the relations between the two Presidency Governments and the Central Government were strained to the extreme. Indeed, as regards the Bombay Government, the discreditable event was witnessed of practically open mutiny against the Central Government. In the end, the Central Government was compelled to adopt the measures advocated by the two Presidency Governments, confessing thereby how inadequate had been the information it had acted upon, and how fundamentally wrong had been its advisers in the advice they had tendered. Few matters will strike English readers more strangely, in studying the account given by Mr. Digby of the relations existing between the Government of India and the two Presidency Governments in the earlier stages of official action as to the famine, than the failure of the former to distinguish clearly those matters which could only be justly dealt with by the Presidency Governments, and for which they must be responsible, and those which peculiarly appertained to the Government of India, and for which that Government, as the central authority, was solely responsible. The early correspondence between the several Governments betrays a meddlesomeness on the part of the Government of India with matters of strictly local administration which, according to English notions, must be fatal to good work, whether on the one side or the other. Indeed, it was not until the proper sphere in famine work of the Presidency Governments was fully recognised by the Government of India—a recognition forced upon it by the strained relations with the Central Government and a clearer knowledge of the gigantic local evils to be contended with—that adequate measures of relief became possible.

When, after much delay, the Government of India yielded an unwilling assent to the representations of the Madras Government, it was still so distrustful that it despatched a special commissioner to the seats of famine in the Bombay and Madras Presidencies to report on the actual state of things, and especially as to the food-allowance to be given on public works for the famine-stricken, and for public relief. The state of Indian finance at the time rendered the question of the cost to which the Government of India would be exposed in affording relief a matter of the extremest importance. The straits, indeed, to which the Government of India is subjected at the best, in this respect, must be exceedingly great, and this consideration would necessarily exercise a most important influence upon its decisions. But, from the beginning, economy seems to have been estimated chiefly upon a strict money estimate—that is to say, as measured by money expended, irrespective of any other but the narrowest considerations. It is true that the Government of India at the outset of its action announced that the avoidance of death from starvation was to be the paramount consideration in giving relief, and no doubt it meant what it then said in the fullest sense. But afterwards it seems to have endeavoured to restrict the meaning of the word *starvation* to absolute deprivation of food—to *acute* starvation, in fact,—ignoring the more generally fatal starvation arising from long-continued insufficiency—*chronic* starvation, that is. So doing, it reduced, for a short time at least, the noble sentiment it had proclaimed to a deceptive verbal phrase.

ARMY MEDICAL SCHOOL AT NETLEY.

THE winter session of the Army Medical School terminated on the 3rd instant. A large party, including the military and medical staff of the Royal Victoria Hospital, the Professors of the school, and a number of visitors from the neighbourhood, assembled in the lecture theatre to hear the positions taken by the candidates for commissions in the final examinations announced, and to witness the distribution of the prizes. Surgeon-General Sir Joseph Fayrer, K.C.S.I., M.D., President of the Medical Board of the India Council, came from London for the purpose of handing the prizes to the successful competitors. These consisted of the Herbert prize and the Parkes medal, both of which were carried off by Mr. T. H. Sweeney, of Dublin, and of the Martin Memorial medal, which was gained by Dr. D. F. Barry, of the Queen's College, Cork. After handing the medals, with suitable remarks, to these gentlemen, Sir Joseph Fayrer delivered an interesting address to the whole body of candidates who were shortly about to commence their career in the public service. No candidates for the Army Medical Department had attended the session. The greater number had entered for the Indian Medical Service, but there were also some for the Royal Navy, as well as several surgeons R.N., who had been already commissioned. At the conclusion of the meeting Surgeon-General Macey, C.B., and the officers of the Army Medical Staff at Netley, entertained the visitors at luncheon in their large mess-room.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 8, 1879.

THE safe and easy removal of vesical calculus is a problem that has engaged the attention of a larger or smaller section of surgical practitioners from the days of AMMONIUS, surnamed LITHOTOMUS, and MEGES, until now. In recent times, however, the choice has practically lain between the crushing and the cutting operation—lithotrity and lithotomy, or rather cystotomy. But despite the accumulated experience of half a century, there is a strange want of unanimity among surgeons, both in this country and abroad, as to the respective merits of the two modes of operating. No one, it is true, doubts that the statistical results of lithotrity, as regards life, contrast favourably with those of lithotomy, but it has been more than once alleged that such a comparison is alike unfair and misleading. To compare lithotrity, conducted under the protection of all the advantageous circumstances of modern knowledge, skill, and instrumentation, with lithotomy performed under the rough but exacting conditions of social life and surgical practice one, two, or more generations ago, is, it is urged, straining statistical evidence to an unwarrantable extent. Still less is it allowable to compare modern lithotrity with modern lithotomy, because nowadays the simplest and most favourable cases are crushed, while the graver and more unpromising ones are relegated to the knife. Indeed there are some surgeons, Sir JAMES PAGET among them, who believe that the time is now arrived when the relative values of lithotrity and lithotomy in similar cases should be rigorously tested on a large scale; and not a few have ventured to anticipate a favourable verdict for lithotomy. Be this as it may, it cannot be denied that the defects of the crushing operation, as hitherto practised, are many and real. They are chiefly these: the necessity of repeated crushings; the irritation arising from the friction of small, sharp, fragments of stone against the mucous membrane of the bladder; the risk of leaving a fragment behind to form the nucleus of a fresh lithic formation; and, lastly, the liability of chronic cystitis, with continued vesical irritability and phosphatic deposit supervening. The last-mentioned contingency Sir HENRY THOMPSON, the chief advocate of lithotrity in this country, regards as unavoidable, and the price paid for greater security to life which lithotrity affords; ascribing it to the injury done to the mucous membrane by the sharp fragments of stone and by the continued instrumentation, and to the chronic retention of urine which is apt to come on during lithotrity in old people. But, as Mr. CADGE, at the discussion in March last at the Royal Medical and Chirurgical Society on Sir HENRY THOMPSON'S paper, clearly pointed out, a more frequent cause is the sacculated condition of bladder so frequently produced by prostatic enlargement. Mr. CADGE explained the series of events in these words: "A calculus descending from the kidney into such a bladder is not passed, owing to the obstruction to the outflow by the enlarged prostate, but augments there. Lithotrity is resorted to; some of the fragments hide themselves in the recesses of the mucous membrane, and either set up acute inflammation, which extends to the peritoneum and quickly ends fatally, or, more frequently, the bulk of the stone is removed, the patient is much improved, but a fragment or two secrete themselves in the sacs and produce chronic cystitis, encysted stone, and phosphatic deposit." It follows, therefore, that, besides the lists of cures and of deaths after lithotrity, there is a third list, comprising those who do not die, but who also do not recover. This list is much larger after lithotrity than after lithotomy, and has been thought by many persons to counterbalance the greater security to life which lithotrity undoubtedly affords.

Many plans have been proposed to reduce or remove the evils which attend and follow the operation of lithotrity. Many years ago Sir PHILIP CRAMPTON, who had a large experience in lithotrity, especially in aged persons, employed with some success an aspiratory apparatus to withdraw the detritus from a distended and inactive bladder. Still later Mr. CLOVER proposed an improved apparatus for withdrawing the fragments. But the practice has not been very extensively adopted. Sir HENRY THOMPSON, for instance, opposed it, except in unusual cases, on the ground that the removal of the detritus by the aspirator caused as much irritation as the crushing by the lithotrite, and that repeated injections, which change rapidly and considerably the volume of the bladder, always irritate the organ.

The correctness of this teaching has of late been called in question by Professor BIGELOW, of Harvard University, U.S., who has recommended a plan by which he hopes not only to remedy the existing drawbacks of lithotrity, but also to extend its scope and utility. This he proposes to do by completely crushing the stone and removing the fragments at one sitting, or, where the stone is very large, at two sittings. This procedure he has designated litholapaxy. The hypotheses underlying it are: first, that the bladder is more tolerant of protracted manipulation than is commonly supposed; and, second, that the comparatively brief manipulation with smooth polished instruments is ultimately less harmful than the prolonged and continued irritation of the sharp angular fragments of a crushed stone. Its objects are, therefore, twofold—to crush the stone and remove the fragments by aspiration at one sitting, and thereby to avoid the possibility of leaving a nucleus for fresh formation, and to obviate all subsequent risks. This innovation strikes at the root of the teaching to which we have been accustomed in this country, and tends to materially change the opinions that have hitherto prevailed on this subject. We confess it was not without some surprise that we found Sir HENRY THOMPSON, in a lecture published in our columns last week, in referring to Professor BIGELOW'S proposal, saying: "I am bound to say that my own system has for a long time past been gradually inclining to the practice of crushing more calculus at a sitting and removing more débris by the aspirator than I formerly did." This is an important confession, and involves the abandonment of his old position. For some time to come lithotrity may be practised under the new and seemingly harsher conditions, and months or even years must necessarily elapse before the surgical world can be in possession of sufficient data for

a definitive judgment. Meanwhile we shall watch and wait.

IT is only reasonable to anticipate more than the usual share of domestic legislation in the approaching session. During the last six sittings of Parliament, what are known as "burning questions" have monopolised attention, to the exclusion of matters of even higher concern which press not less earnestly, but more appealingly than clamorously, for consideration. Who is to advise the Government on such topics as require medical and sanitary guidance for their elucidation? It is only fair to assume that the Cabinet will feel the need of counsel, and seek aid in some quarter. It would be reassuring to the profession to learn who the medical advisers of the Government really are. Judged by the policy of the Administration, it is difficult to credit them with any large measure of acuteness, and serious doubt must be entertained as to their actual acquaintance with the needs of the public and the profession, in their mutual relations, or the existence of that sympathy which trusty counsellers should always feel for the interests and aspirations of those on whose behalf they presume to act as spokesmen. In short, we are compelled to the conclusion that the Government is badly advised, and that its referees are either inexperienced, apathetic, or out of harmony with the spirit which pervades the profession. This is a consideration of extreme gravity, and we venture to think it is one that may usefully engage the attention of our readers, and should even form the subject of remonstrance before a new session begins, and another opportunity of securing necessary reforms is sacrificed. We will not press the personal phase of the question *who* are the medical advisers of the Government, although conjecture is rife on the subject and the uneasiness felt is deep and widespread. The so-called "Council of Medical Education" has clearly placed itself outside the pale of possible consultants. That august assembly—a galaxy of great lights, but not very luminous in its corporate character—is, or ought to be, engrossed with the lugubrious business of self-amendment. It has not fairly reached its majority, but lies in a hopeless state of decrepitude, and, with poetic justice rather than practical wisdom, has been placed under its own treatment and left to work out its own cure. There is an old adage describing the mental plight of a client who is his own lawyer. It would be unfortunate if, *mutatis mutandis*, the principle should apply to the attempted auto-recovery of the Medical Council! Meanwhile, it is scarcely possible to suppose a Government, which has evinced so much intelligent irony as is involved in the reference of this question of reform to the body standing in need of amendment, would select that preoccupied authority as a Mentor. The same consideration substantially would probably, for the time at least, exclude the respective heads of the professional corporations from the office of counsellor. Everything points to the conclusion that the Cabinet is inspired by persons expressing individual opinions, and hence arises the necessity for a word of warning as to the value of such advice and the responsibility of those who give it.

The time is one of critical moment, and a preliminary reflection, which those who undertake to supply counsel should bear in mind and press strongly on their clients, is that the shape in which measures directly or remotely affecting the public health are now cast will cling to them for a lengthened period. Nearly the whole field of reform is covered by the schemes propounded by the Ministers of the Crown or private members, and there is scarcely a proposal which does not either directly involve, or supply the opportunity for raising, some medical or sanitary question. Indications of change are apparent in nearly all the public departments, and perhaps there was never a period when science and the profession had more to say, or were so urgently in want of a competent spokesman. This is matter of consummate interest, and we trust it will receive the attention it deserves. To speak plainly, the concerns of medicine are grievously neglected, and the community, not less than the profession, suffers. During the last ten years, while public attention has been absorbed by the strife of parties and the discussion of "great" questions, the smaller, but equally important, details of social administration have been overlooked. Meanwhile, during the same period, a fresh phase of science—State Medicine, which consists in the application of ascertained principles to the preservation of health and the avoidance of disease—has sprung into existence. This new power of the State waits to be employed, and the present conjuncture is propitious for its induction to office in every place and section of the public service. State Medicine is prepared to become a prominent factor in the commonwealth. Its claims and capabilities are so great that, as we have repeatedly urged, it would be expedient to appoint a Minister of Health, and to recognise the interests of sanitary administration as an integral part of a Government policy. Whether the time is yet ripe for so intelligent a recognition remains to be seen. In any event, it is essential not only to the contentment of the profession, but to the welfare of the community, that medical considerations should receive, in the legislation of the session whereupon we are entering, a share of attention which has heretofore been denied to them. The opportunity will assuredly be lost unless the Government is provided with trusty and intelligent advisers. Who these should be we will not presume to indicate. It is a perpetual drawback to the interests and progress of medicine as a public science that the profession is practically unrepresented in either House of Parliament. This is a fault which might surely be remedied, if medical men were in earnest in their often-expressed desire that our science should be adequately represented. The man and the constituency can scarcely be hard to find. For the moment, however, attention needs to be concentrated on the point we have endeavoured to bring under special notice. The Government of the day is manifestly ill-advised. Means should be taken to provide it with better counsellors, and to this end the profession will need to exert its personal influences, while competent and unbiased authorities on the manifold questions of interest must not hold back.

WE are glad to see some indications that the members of the British Medical Association are awaking to the importance of the present juncture in medical legislation. At a meeting a few days ago of the South London District division of the Metropolitan Counties Branch of the Association the great points of the subject were touched upon by Dr. LUSH,

Mr. NELSON HARDY, Dr. ANDREW CLARK, Dr. ALFRED CARPENTER, Mr. W. H. CARPENTER, and Dr. F. A. MAHOMED. Dr. LUSH, M.P., after referring with approbation to many good points in THE LANCET Bill (which, as our readers know, provided a small Council and a perfectly independent Examining Board), and after a proper testimony to the services of Dr. WATERS, of Chester, spoke in favour of diminishing the Medical Council. He said it had become a debating society. Instead of increasing its numbers, he would reduce them, as the Bill now before Parliament in his name did. This Bill differs from THE LANCET Bill, as far as the constitution of the Council is concerned, chiefly in giving a Council of nineteen instead of one of twelve. Dr. LUSH'S present Bill gives to the corporations eight representatives, and to the universities four. In other words, it gives to the bodies interested in the existing system of teaching and examining twelve representatives, as against four representatives of registered practitioners and four Crown representatives—a preponderance which it would be well, in our opinion, to avoid. Mr. NELSON HARDY, Honorary Secretary to the Branch, went fully into explanations of the provisions of the Bill. Dr. ANDREW CLARK, who presided, after an account of the medical organisation of Canada, gave it as his opinion that the General Medical Council was in an unsatisfactory state. Three classes ought to be represented on it: first, the great working body of the profession; secondly, the scientific part—that is, the great teaching bodies; and, thirdly, the public through the Crown. Dr. F. A. MAHOMED thought that the Medical Council should cease altogether to represent vested interests, and be appointed solely by the profession and the Crown.

The satisfactory thing about the discussion is the proof it affords that leading members of the Association are giving their minds to the question now seriously raised as to the constitution of the Council. All will allow the obligation the profession is under to the Reform Committee of the Association, and especially to its indefatigable chairman, Dr. WATERS, of Chester; but still there is something wanting in the contribution of the British Medical Association to the solution of this problem, and the discussion we are referring to leads us to hope that this something is about to be forthcoming. The Bill of the Association is too one-ideaed. It is very easy to say "add six members to the General Medical Council, and all will be transformed. Enlarge the debating society by six." But Dr. LUSH, Dr. ANDREW CLARK, and many others clearly are of opinion that this is not the only change wanted. The Council needs to be reduced in size, and that by reducing the individual representation of interested bodies. Not only has the view of the Medical Reform Committee consisted too much of one idea, but there has been something too mechanical in the way in which the one idea of adding to the Council has been from time to time forced and fostered. Organisation is a very fine thing, but it should not crystallise the minds of those it represents. It would be far better for the Reform Committee to take the free opinion of the sectional and country branches of the Association on the present and promising position of the question, and on the various proposals for reducing the size of the Council, and the individual representation of bodies in it having pecuniary interests, than to call for an abstract vote by return of post in favour of a mere addition to the numbers, which of course can be had by hundreds. Another question which should be discussed in such a meeting as the above, and in reference to which immediate representations should be made to the Medical Council, is the lamentable occupation now absorbing both the Council and its officials—the registration of dentists without medical education by the thousand. This is not done without injury and indignity to the medical body at large. It may bring money to the Medical Council, but this is a poor compensation for the interference with its proper medical work, and for the loss of *prestige* sustained by it and the profession. We hope to see the example of the South London Division of the Metropolitan Branch extensively followed in the provinces, and the Reform Committee adapt its suggestions to the circumstances and necessities of the case.

THE lunacy (for no other word would here be appropriate) which has struck the Governments of Russia, of Germany, of Austro-Hungary, and of Roumania, with respect to plague, is one of the most humiliating spectacles which has been presented in these latter days. It seems as if we had been suddenly cast back into the Middle Ages as we read the reports of the various measures adopted by the several Governments for the arrest of the formidable disease; and the illusion is made complete when the most distinguished of Russian physicians describes the malady, as seen in the province of Astrakhan, to be indistinguishable from the "black death" of the fourteenth century, and speaks of it as "black death." Acting, as it were, on notions which belong rather to the barbarous medicine of the fourteenth than to the scientific medicine of the nineteenth century, the Governments referred to have precipitately had recourse to certain measures of quarantine of which the unvarying testimony of history has been to show that they have been useless in arresting the progress of any infectious disease whatever, while they have as invariably aggravated the conditions favourable to the development of such disease among the communities having recourse to them. We say "precipitately," for it is a fact that in not a single instance was inquiry made as to the actual nature of the plague in Astrakhan by any, even the Russian, Government, before these measures were had recourse to. We read of a medical commission, composed of German and Austro-Hungarian physicians, headed by the great German epidemiologist, Dr. AUGUST. HIRSCH (who, although protesting against the indiscriminate means adopted by his own Government, is still true to the principal study of his lifetime), starting for Russia to investigate the plague, while concurrently the same Governments prohibit the importation from Russia into their territories of linen-cloths, rags, furs, skin, leather, caviare, fish, Sarepta balsam, felt, and waste-paper, of the danger of which, as mediums for conveying the infection of plague, we say it advisedly, there is not a tittle of evidence; of disinfecting (!) Russian railway carriages when they reach German or Austro-Hungarian soil; and of establishing sanitary cordons and quarantine over many hundreds of miles of frontier. While the disastrous effects upon many trades of these measures and the consequent evil influence upon the means of subsistence of the poor are certain, at a time when

it is of essential importance such effects should be guarded against, the advantage proposed to be gained in regard to the spread of plague is absolutely illusory. Is it possible that the inordinate folly of such measures, as proved by their utter failure in the same countries when cholera first spread into Europe, can have been forgotten? Have the results of the experiences of plague, during the first quarter of the present century, wholly and absolutely condemnatory of the quarantines now proposed to be conducted on the Continent, been lost sight of? Moreover, are the invaluable teachings as to the disease, bearing upon the subject since its reappearance in 1853, unknown in Germany? We cannot think so, and we are compelled to believe that these measures have been dictated without regard to modern knowledge on the subject, and in a spirit of panic which is in the highest degree discreditable to the Governments concerned.

The matter affects us very nearly here in this country, for unmeaning panics of this kind, among presumably the most intelligent as among the least intelligent of a country, quickly spread. Our old quarantine law, in Great Britain, is, in reality, a law primarily against plague, and has not been repealed—is, in fact, in force. If we were to allow ourselves, influenced by the panic of continental governments, to attempt to put it into practice, we should not only stultify our recent public health legislation and administration, but plunge ourselves into endless difficulties. Fortunately Parliament is about to meet, and this question will no doubt receive consideration. The course of the Government is obvious—namely, to resist as firmly the adoption of quarantine in plague as it did (after bitter experience of its futility) in cholera. Any immediate disturbance to commerce would be but temporary; but if Government palters with the question, and plague, as is probable, should become resident for a time in Europe, our great safeguard against the disease, in the strict exercise of the internal sanitary administration now existing, may be gravely unsettled, and the course of our commerce put largely at the mercy of any maritime State on the Continent.

AN important series of researches on the mechanism of the action of Arsenic has lately been undertaken by Professor BINZ, of Bonn, and H. SCHULZ, who have described their results in the *Centralblatt für Med. Wissenschaften*. "How is it that arsenic is a poison?" was the question first investigated, and the results which are reached throw some light on its therapeutic influence.

If a solution of arsenious acid or of its neutral salt is injected beneath the skin of an animal, no trace of local caustic action results; but, unless the animal quickly dies by paralysis of the heart, the stomach and whole intestinal tract are, after a few hours, intensely inflamed. A saturated solution (in the cold) of vitreous arsenious acid, or of sodic arsenite or arseniate, placed in the conjunctival sac of a guinea-pig, produces only slight local redness—hardly more than an equally strong solution of ordinary salt. Arsenic has no immediate affinity for albumen, and is, as BUCHHEIM remarks, probably first transformed into a poisonous compound in the organism; but of the precise nature of this poisonous compound we are at present ignorant.

In experimental chemistry both the compounds of arsenic are available as oxygen-carriers. After reduction they are easily oxidised, and may be again employed as oxidising agents. Both these processes may take place when the arsenious compounds are in contact with organic substances. If arsenic acid, or its weak alkaline salt, is digested with fresh albumen, fibrin, pancreas, &c., and even with vegetable protoplasm, dialysis always yields arsenious acid, and no decomposition occurs. Decomposing fibrin gives the same reaction. On the other hand, if arsenious acid, free or as its salt, is digested with pancreas or with the fresh leaves of Lactuca sativa, dialysis yields definite evidence of arsenic acid. Defibrinated arterial blood, as well as pure oxyhæmoglobin, on the other hand, leave the arsenious acid unchanged.

In six cases of slow subcutaneous poisoning, it was observed that the gastritis was most marked in the neighbourhood of the pancreas, and that it constantly proceeded from the posterior wall. This is corroborated by some observations in cases of poisoning in men, where the place at which the gastric irritation commenced could be traced. This localisation has nothing to do with the local accumulation of the arsenic taken by the mouth, because in the experiments on animals in which the arsenic was introduced directly into the blood the same change was observed. Further investigation led BINZ and SCHULZ to the following theory. The arsenious acid, which has an action on albumen, is certainly in part oxidised to arsenic acid, and this is, again, reduced. Protoplasm effects the oxidation, and in it also the reduction occurs most strongly. This unusual interchange of nascent oxygen within the molecules must tend to the formation of nitrous acid, and in part also to nitrous oxide, the latter being further transformed to nitric acid, and thus the protoplasm will be destroyed more quickly than the interchange of matter can renew it. The arsenic thus plays the part of an oxygen-bearer, and leads to a sort of molecular combustion. The interchange of the oxygen probably takes place most readily in the glandular organs of the intestinal tract, but may occur elsewhere, and probably does occur, especially in the nerve-centres, in which so energetic an interchange of material is always going on. Hence the irritation and quick paralysis of the nerve-centres. We are also able to understand, on this theory of its action, why there is so rapid a diminution of glycogen in the liver when arsenic is given with food; why the organ undergoes fatty degeneration; and also the effect on malaria, and the subsidence of lymphomata, under its use.

THE Report of the Medical Officer of the Local Government Board (Dr. E. C. SEATON), the publication of which we announced last week, is not less interesting and important as to its contents than previous reports emanating from the same source. In addition to reports, or extracts from reports, of inquiries relating to local prevalences of disease, by Dr. BALLARD, Mr. W. H. POWER, and Mr. NETTEN RADCLIFFE, it contains a second report by Dr. BALLARD on effluvium nuisances, a memorandum by Mr. NETTEN RADCLIFFE on the progress of Levantine plague in 1877 and part of 1878 (which brings the history of the disease down to the period imme-

diately preceding its appearance in Russia), a memorandum by the Medical Officer on the systematic action taken in England to prevent importation of infectious diseases, a report by Dr. KLEIN on infectious pneumo-enteritis in the pig, reports by Dr. THUDICHUM on further researches in chemical biology, together with other important matters relating to the work of the Medical Department. Each of the particular reports referred to has its special interest, and demands separate consideration. For the present we content ourselves with the Medical Officer's own Report.

If we were to judge of the position of the Medical Department of the Local Government Board by the general contents of this volume, we should come to the conclusion that at no time had the Department given more striking indications of maintaining the exceptionally high standard of its work. Indeed, this may be taken as inevitable, so long as the present holders of office in the Department retain their posts and are permitted to make their work known to the world. But it is impossible to read Dr. SEATON'S summary of the work done by his Department during 1877, and of the administrative conditions under which that work had to be performed, without the conviction that the Local Government Board has entered upon a policy of (to use a popular phrase) starving out the Department. Having regard to the very wide and important duties which, as this Report markedly shows, devolve upon the Medical Department, it seems to us clear that the obvious present insufficiency of the staff must eventually lead to a mere formal exercise of functions, irrespective of the merits of the work undertaken. If at the present moment the Medical Department of the Local Government Board holds a special place in the eyes of the profession for the quite exceptional character of the work it does—work for the most part only possible on the part of officials attached to a central authority—it must not be forgotten that this is an accident of the Department, so to speak, for which the Local Government Board deserves no credit, and has none. The present members of the Medical Department, trained under very different auspices, brought to the Local Government Board the high reputation they so deservedly possess. It is difficult to conceive the present members of the Medical Department doing work other than will maintain their reputation. But it is not difficult to conceive, as time rolls on, and these members one by one withdraw from their posts, that their places may be filled by others appointed under very different circumstances, and who will be required to subordinate their abilities, however great, to the formalism of office-routine. Dr. SEATON'S report, in fact, suggests an unpleasant vision of official Thuggism, and we can see the Local Government Board, as it were, preparing the ligature with which it proposes ultimately to strangle its Medical Department, as originally conceived and administered before the infatuated alliance with Poor-law Administration.

IN connexion with the papers to be read at the Medico-Chirurgical Society next Tuesday on Ophthalmoplegia and a Recovery from true Leprosy, we are informed that several patients will be produced. They will be at the Society's rooms half an hour before the time of meeting, for inspection by the Fellows.

Annotations.

"Ne quid nimis."

THE AFGHAN WAR.

OUR correspondent sends us some further particulars of the medical arrangements connected with the troops employed in the Khyber district. On the advance of the force to Jellalabad, on the 19th December, under General Sir Samuel Browne, the field hospital of the 1st Division at Ali Musjid was broken up, rest depôts only being left there and at Lundi Kotal; one-half, with beds and equipment for seventy-five patients, was formed at Dakka under Surgeon-Major Evatt, and the other established at Jellalabad, with Surgeon-Major G. Davie in medical charge.

The march to Jellalabad for three stages is described as very trying, not only from the difficulties of the road, but the absence of any food or grazing for the camels, causing them to be two or three days without forage, added considerably to the hardships of the march. Fortunately the winter rain had not set in, and the medical transport reached its destination with few casualties. A daily dâk of twenty dandies (a lighter description of dhoolie, requiring four bearers instead of six) was established from Dakka to Ali Musjid, for the transport of sick *en route* to the base hospitals at Peshawur. The increased sickness among the native troops, and the absence under their regimental system of reserves of medical supplies, compelled their medical officers to indent freely on their *confrères* of the British service for medicines and hospital stores. The latter's supply, though ample for their own requirements, is hardly able to meet the strain the extra demands entail without a breakdown. The dual system will be again to blame should one occur.

General Maude's Reserve Division having moved up from Hussan Abdal to Jumrood and Ali Musjid, Surgeon-Major Hanbury, the senior medical officer, established the 2nd Divisional Field Hospital at Jumrood, and by the 1st of January it was ready for the reception of sick, Surgeon-Major Wright being in medical charge.

The men of the 81st Regiment are reported to be very sickly, chiefly from fever. Prior to the campaign they were quartered in the Peshawur valley, and are doubtless saturated with the malaria so universal there in the autumn months, and are hence less able to withstand the hardships and exposure incidental to campaigning. At Peshawur, the officers' hospital, with accommodation for thirty beds, was on the point of completion; and a base hospital for the sick and wounded of native corps and native followers had been established there with the aid of the officers of the Army Medical Department.

THE GOVERNMENT INQUIRY INTO THE RECENT EPIDEMIC OF SMALL-POX IN LONDON.

IT is to be hoped that, when Parliament meets, Dr. Lush will inquire of Mr. Sclater-Booth as to the progress which has been made by the President of the Local Government Board in fulfilment of his promise, in answer to Dr. Lush, on July 16th, 1877. On that occasion, the President said, "The epidemic appears to be subsiding, but is not at an end. I shall take care to have its history investigated, and the experience of the last twelve months collected and put into shape, with the view of considering whether further legislation is required." Unfortunately, the subsidence of the epidemic was at that time only temporary. In the end of 1877 the epidemic again became active, and in some parts of London in 1878, notably in Islington, according to the report of Mr. Tidy, the scourge reached a height which it had not attained in any previous part of its

history. It is extremely desirable to have the history of the epidemic investigated with as little delay as possible. The report of Mr. Tidy is not without interest, but it is exceedingly disappointing as a contribution to the history of the origin of the outbreak, which, as we well remember, seemed to begin in Islington, and was spoken of for weeks in the papers as the outbreak of small-pox in Islington. Mr. Tidy shows that the sanitary officers of his parish knew nothing of the disease till the first death was registered in the first week of September, 1876. Of five attacked in this fated house, only one recovered, and he had been attacked a month before the registration of the first death. But no positive information is given as to the origin and relation of these cases or the interval which elapsed between the occurrence of them and the personal investigation, if any, of the medical officer. It is clear that the lapse of time will greatly add to the difficulty of getting such particulars, and that if despatch is not used we shall have another epidemic upon us to absorb the energies and the anxieties of the Local Government Board. Surely, the least that can be done to improve our laws for circumscribing preventable disease is to get information of the ways in which our present laws fail to do so.

CONTAGIOUS PLEURO-PNEUMONIA FROM THE UNITED STATES.

A CARGO of cattle has recently arrived at Liverpool from the United States of America, *vid* Canada, and among them were found several affected with contagious pleuro-pneumonia—a circumstance which necessitated the destruction of all the animals at the place of debarkation. This must be looked upon as a most serious event, because of the interruption it will most probably cause to the very important traffic springing up between America and this country in live stock. It would appear, however, that the introduction of the disease by United States cattle was not unlooked for by those who knew that since 1843 it has been present there, being imported from the continent of Europe and this country on several occasions; and that lately, because of the increased traffic developed with England, it has been greatly extended in several of the stock-raising and pastoral States. This extension has been due to the almost total absence of sanitary measures and the unchecked movement of infected cattle from cowsheds and pastures to fairs and markets, as well as to the neglect of veterinary science by the Government of those States, in which there are very few qualified practitioners.

The notion has been entertained by some people that the disease discovered among the cattle disembarked at Liverpool was not that with which we are so well acquainted in this country, and which has caused such serious ravages for the last half century, but an affection due to the hardships undergone on the passage. But the pathological anatomy of the disorder presents characters which the veterinary experts at Liverpool well understood, and readily recognised in the thorax and its contents of the animals killed at the docks. This form of pleuro-pneumonia in the bovine species is a zymotic and specific disease, and has never been found to arise spontaneously, but to owe its existence altogether to its infectious properties. During this century it has been carried from Europe to nearly every part of the civilised world, and its geographical progress has been as clearly traced as that of any transmissible disease with which we are acquainted. No hardship, bad food, exposure to weather, or any other cause, except infection, will produce it. Of this there is more than ample evidence to hand. Its supposed spontaneous origin on board ship is probably due to the fact that those who entertain the idea were not aware that it was prevalent over such a wide extent of the United States.

Though we must look on the interruption, and perhaps entire suspension, of the live-stock traffic with America as a great misfortune, yet it must be admitted that it is not without one encouraging feature, in that it will tend to accelerate the progress of the dead-meat trade, and thus do away with the suffering which cattle endure in transit across the Atlantic. We have always been of opinion that the flesh of animals exposed to such vicissitudes and bad hygienic conditions as are encountered on board ship, especially at this time of the year, cannot be so desirable as food as that which has not been subjected to such injurious influences. There is also the loss the cattle sustain in weight and condition to be taken into account, no less than the deaths which take place on board during stormy weather. There can be no doubt that the public interests, no less than the public health and the aims of humanity, will be best promoted by a traffic devoted altogether to dead meat from across the Atlantic. At any rate, the danger attending unrestricted trade in live cattle with our American cousins is fraught with too much risk to our home stock to permit of its being continued on the footing hitherto existing. If contagious diseases in animals are ever to be extinguished in this country, care must be taken that, while we impose severe restrictions upon the home trade in order to effect this object, fresh instalments of infection are not supplied to us from beyond the sea. As these diseases depend solely for their maintenance upon their contagious principles, no doubt can be entertained as to the possibility of their eradication, if only we are determined to effect it. This question is of urgent practical importance, and its bearing is not, in our judgment, affected by the official remonstrance addressed by the authorities of the United States to the British authorities in Canada and at home. The Privy Council should be warned to guard against the danger of misconception and mischievous inaction.

THE REMOVAL OF CHRIST'S HOSPITAL SCHOOL.

THE long-mooted proposal to remove Christ's Hospital, commonly known as the Bluecoat School, from Newgate-street into the country promises, although it has not actually begun, to assume a practical shape. The prejudices which have heretofore stood in the way of change are rapidly breaking down, if, indeed, they have not been absolutely set aside, and the transfer is now spoken of as a near contingency. It remains to urge that the adoption of this salutary and sensible measure of reform shall be the occasion of a general reconsideration of the charity and its administration. It is clearly one of the crying weaknesses of the City administration. The use made of the funds at the disposal of the Governors of Christ's Hospital, though excellent in their way and sphere, is not worthy of the founders. It is a serious, though common, error to assume that original benefactors mean to tie up their bequests in such a fashion as to render them anachronistic, if not obsolete, in the future. The late Lord Lyttleton was fiercely assailed for his endeavours, as chairman of the defunct Endowed Schools Commission, to "shake off the dead hand." The phrase is not happy, though it has a strictly legal interpretation, and is historic. The dead would be scandalised to find that their wishes were so literally construed as to impair the usefulness of their charity. For example, the founders and original benefactors of this school would roundly denounce the crass folly of a close adherence to custom which has made the garb and manners of the pupils absurd in the eyes of society. It never entered the thoughts of the benefactors of old that the administrators of their bounty could so strangely interpret their intentions as to perpetuate a dress which has become ridiculous. It is high time that the influence of common sense began to make itself felt in the matter

of endowments. Something was done by the Endowed Schools Commissioners, perhaps too ruthlessly; but more waits the doing, and to the obviously prudent resolve to remove the school to a healthier and less costly site in the country should be added the determination to abandon meaningless peculiarities, and render the charity a praise, instead of an anomaly of the age.

THE PROFESSION AND THE PUBLIC.

AT an inquest held on Tuesday, the 28th ult., by Dr. Hardwicke, at the St. Pancras coroner's court, on the death of Mary Georgiana Hewitt, the jury, on an *ex parte* statement of a brother of the deceased, appended a rider to their verdict of "Death from narcotic poison," to the effect that the master and mistress of the deceased were guilty of gross neglect in placing her in a damp bed and by not having her properly attended to. Now, as the master thus censured is a well-known medical practitioner, Dr. Castaneda, it would have been the barest justice to have withheld this damaging and injurious expression of opinion until he had had an opportunity of confronting the allegations made by the brother, who did not see the deceased until a day after death. The allegations were, that the deceased had been placed in a damp bed in an attic, and that there was insufficient clothing on the bed, only a waterproof and a shawl. Dr. Castaneda, through his solicitors, at once wrote to the daily papers that had given publicity to the report, denying each of these statements, and he has, moreover, shown us overwhelming sworn evidence of their inaccuracy. The room was at the top of the house, but it had a ceiling, the floor was carpeted, and it was furnished with bedstead, wardrobe, table, chairs, &c. The bed on which the deceased lay during life was supplied by a fellow servant with three or four blankets, two sheets, and two counterpanes. The waterproof and shawl were put outside these, because the deceased complained of feeling cold. After death the bedclothes were, of course, removed, and placed under the bed. As the brother did not see the deceased until the day after death, it is not surprising that he should have found only a waterproof and shawl on the bed. In addition, we have the evidence of a medical friend who saw deceased that the room was free from damp. Comment is unnecessary.

THE PATHOLOGICAL ANATOMY OF THE CARDIAC GANGLIA.

THE subject of the pathology of the cardiac ganglia as yet belongs to the domain of theoretical, rather than to that of practical pathology. Their disease affords so ready an explanation of many of the phenomena of cardiac disturbance, whether with or without organic disease of the heart, that it is often referred to, without consideration of the scantiness of our knowledge of the subject. Lancereaux described in 1864 a case in which a man who had suffered from angina pectoris, and had died in an attack, presented a morbid state of the cardiac plexus—vascularity, exudation, and accumulations of nuclei compressing the nerve-fibres. Iwanowsky, in an important work published in 1876, has investigated the conditions of the cardiac ganglia in exanthematic typhus. The ganglia are chiefly embedded in the septum between the auricles, especially adjacent to the upper part of the fossa ovalis. They are of round or oval form, enclosed in a fibrillar connective tissue capsule, and surrounded by a dense network of vessels. The nerve-cells contained in them are round or oval, and surrounded by capsules, which consist of a layer of flat epithelial cells, each nerve-cell having one or two fine processes. The alterations found by Iwanowsky in typhus were a swollen and opaque state of the ganglion cells, indistinctness of their nuclei; the endothelial capsule was often swollen. In the intermediate tissue granulation-cells were met with, and similar corpuscles were found between the nerve-cells and the endothelial capsule. Hence Iwanowsky concludes that the ganglia are the seat of a parenchymatous inflammation, which may account for the occasional fatal paralysis of the heart in the early stage of that disease. Wassilieff has described changes in the ganglia in hydrophobia very similar to those found by Iwanowsky in typhus, and he laid especial stress on the existence of spaces between the cell and its capsule, which are of very doubtful pathological significance. A further important contribution to our knowledge of the changes in the cardiac ganglia has been made by Dr. Putjatin, of St. Petersburg, who has examined the state of the ganglia in a considerable number of cases of chronic heart disease. In a case in which cardiac disturbance was observed during life, and the patient died from cardiac paralysis, with little obvious heart disease, the vessels of the ganglia were distended, and granulation-cells were scattered among the nerve elements; the latter were little changed. In cases of old organic heart disease more marked changes were found, consisting especially in the increase of the interstitial connective tissue between the ganglion-cells, in which fibres and round and oval granulation elements were met with. The nerve-cells were shrunken and more or less granular. In some cases the diminution in size of the cells was to one half of the normal, and the epithelial capsule had almost disappeared. A somewhat similar change was found in a case of phthisis with atrophy of the muscular fibres of the heart.

From these cases Putjatin concludes that the changes in the ganglia are most marked when there exists recognisable disease of the heart and aorta. In several of the cases of organic disease of the heart in which changes in the ganglia were found the pathological evidences of constitutional syphilis were present elsewhere, and it is possible that the syphilitic infection may have had an influence on the production of the sclerosis of the ganglia. In some cases it is believed that the change in the ganglia is secondary to the change in the aorta; that an inflammatory process beginning in the aorta may pass through to the connective tissue beneath the pericardium, and later extend by continuity to the connective tissue around the ganglia.

It is pointed out by Putjatin that such changes must necessarily produce various disturbances in the action of the heart. Physiology teaches us that the rhythmical action of the heart is regulated by the nerve-ganglia. Some form of angina pectoris, and many forms of irregular action, may be due to these changes. It seems to be probable, also, that acute changes in the ganglia may be the immediate cause of cardiac paralysis.

KLEPTOMANIA AND ARTIFICE.

IN his summing-up of a recent case of taking without stealing, the Assistant-Judge of the Middlesex Sessions inferentially propounded a known fallacy. He directed the jury to note before deciding whether the act—the taking of two pairs of gloves—was consciously or unconsciously committed, if there was "any art or precaution in the way in which the gloves were taken." This consideration may be admissible as a test in the absence of alleged disease, and, therefore, it was a just submission in the particular case to which we allude, which was proved to be one of simple absence of mind; but it must not be forgotten that there is often a great deal of "art" and "precaution" in the proceedings of a person affected with kleptomania. It must not be too hastily assumed that the presence of method is fatal to the theory of madness, even in such unformulated derangement as consists in what is commonly called "absence of mind." No one who has watched the doings of "absent" folk can fail to have observed the pains taken

to carry out a prank, of which the performer is, as the phrase goes, "unconscious." Forensic, and therefore judicial, acumen has mastered the scientific mystery of unconscious activity in its most pronounced varieties, but it has yet to carry the investigation far enough to fathom the depths of purely automatic subtlety, and it is still utterly ignorant of the class of actions which are consensual—that is, governed by the sensory impressions only—but, nevertheless, often so like voluntary acts as to cheat the unskilled detective. What would the judges say to the decapitated frog, who, finding he cannot scratch himself with one paw, has recourse to the other? The creature has lost his head, and performs an apparently voluntary action! Surely something approaching the same artfulness and precaution may be manifested by the man who has only lost his head in a metaphorical sense, but is practically unconscious, and, therefore, so far as the present is concerned, unaccountable for his actions.

THE ARMY MEDICAL STAFF AT THE CAPE.

THE authorities at the War Office (should we say more properly the Army Medical Department?) seem at last to be alive to the fact that our troops cannot, even in the salubrious climate of South Africa, get through a Kafir war without adequate medical aid. Several detachments of civil surgeons have been sent off to the Cape during the past month, and these were supplemented last week by four others, Messrs. R. C. Johnson, R. E. Wood, H. E. Linden, and R. E. Ryley; so that the principal medical officer in Zululand, the present seat of war, has now on his staff upwards of thirty officers, many of whom are civilians. These gentlemen will, during the progress of the campaign, have time to look about them, and see how much room exists for civil practice at the Cape. And unless we are much at fault, the majority of them will remain behind when the war is over, having found that good incomes are to be made in one or other district without the expenditure of capital. The life is somewhat monotonous, but the returns are satisfactory. Meanwhile, those who go out in army employ should study how to pack up their necessaries and medical stores in the smallest possible compass; for in no other quarter of the world where British troops have operated are the roads worse and locomotion more difficult, so that all impedimenta are, by standing order, reduced to a minimum, including, of course, appliances for sick and wounded. A correspondent who had medical charge of about 300 volunteers in Griqualand West, during a week's campaign against Gasibone (a native chief) some twelve months ago, writes that he was twice stuck fast with his waggon and six mules in a drift for four or five hours, and that during the entire excursion (for it was a bloodless victory) no such thing as a bath could be had, for the streams were in most places but knee-deep, and contained a fluid resembling pea-soup rather than water. So that service in South Africa is not always superlatively pleasant, in spite of the salubrious climate.

THE PROPAGATION OF VICE.

THERE would seem to be no need of argument to attest the fact that vicious examples help to propagate vice, and it might fairly be assumed that experience has shown spectacles of crime and wrong-doing to be injurious to public morals, even though the avowed intention of such parade be to hold up the evil to general reprobation. The public thirst for "sensation" is not easily appeased; and it is difficult to blame the press for yielding to the ceaseless clamour for "news." The competition is so great that a newspaper which notoriously withheld intelligence of the class most greedily devoured by the *quidnuncs* would be speedily worsted in the struggle for popularity. Nevertheless, the voluminous and graphic reports which appear in the lay papers are certainly mischievous in their influence. Our own standpoint in this matter is, of course, specially medical, and on psychological considerations we urge a strong protest against the course which has been pursued with regard to the hideous miscreant Peace. The moral tone of many weak minds must inevitably have been lowered by the daily doses of information as to the bearing, the behaviour, and the antecedents of this culprit. Is it vain to hope that his name and deeds may at length be permitted to drop out of memory? The *immediate* effect of such "news" as can still be served up in the columns of the newspapers may be to impress average readers with the enormity of his crime, and the justice of his doom, but the secondary influence of the reports which may be expected cannot fail to familiarise minds lacking in moral strength with details of which they must be unable to form an adequate conception, and, as represented to them in print, are sure to do harm. What imagination, not vividly impressed by actual observation, can picture the daily intensifying agony of a consciousness hourly approaching a horrible and ignominious death? Nothing that has or can be written on the subject will ever approximate to the truth. Better let silence leave room for such fellow-feeling as instincts of humanity may engender, than feed the morbid appetite with daily doles of intelligence which, after all, must be mere guesses at the mental state of the condemned man, or wholly misrepresent his sufferings. The customary statement about "firmness," "composure," "submission," and the like, are not only mere inferences, more or less fallacious, but they are mentally poisonous in their effects. Surely the infliction may be spared us, and the propagation of vice by lowering the moral tone and inciting the faculty of imitation avoided, without any real loss to the public or its too enterprising purveyors of "news."

PROFESSOR TYNDALL ON QUARANTINE.

PROFESSOR TYNDALL favours the world, through the columns of *The Times*, with certain information he possesses as to quarantine, and which he believes does not quite accord with views recently enunciated by *The Times* on the subject. If it had been the Professor's intention to furnish a striking illustration of the adage that a little learning is a dangerous thing, he could not have more completely succeeded. Galveston, he tells us, on most respectable local medical authority, escaped yellow fever during last summer and autumn's serious extension of the disease in the Southern States of America, and this by reason of all communication having been cut off from places infected by the disease as soon as the infection became known to the Board of Health. Had Professor Tyndall been familiar with the history of quarantine in yellow fever, or referred to easily accessible information on the subject, he could scarcely have avoided coming to the conclusion that a grievous fallacy might probably lurk beneath the positive statement on which he depends as to the effect of the measures of quarantine described as excluding yellow fever from Galveston. But, taking these statements as they stand, it is to be observed that they were believed to be successful because they approximated to the conditions which Mr. John Simon has laid down as cardinal to successful quarantine—namely, that the quarantine should "be conducted with extreme rigour, and with the precision of a chemical experiment." It is possible that Galveston last summer and autumn may have been able to fulfil these extremely difficult conditions, but it would be interesting to know from Professor Tyndall how they are to be fulfilled on the coasts of this country, or the extensive lines of frontier extending between Russia and Germany, Austro-Hungary, and Roumania. The writer we have last quoted has also said: "A quarantine which is ineffective is a mere irrational derangement of commerce; and a quarantine of the

kind which ensures success is more easily imagined than realised." Quarantines of the sort now being practised against plague in Russia, Germany, and Austro-Hungary failed most completely when exercised against cholera in 1832 under conditions infinitely more simple for its effective practice than those which exist at the present time. The result of their adoption then was solely such irrational derangement of commerce as Mr. Simon refers to. *The Times* has never been truer to its great mission than in endeavouring, as it has, since the reappearance of plague in Europe, steadily to keep before the public mind the unreasonableness and fallaciousness of measures of quarantine, such as are now adopted on the Continent, as a protection against plague.

PILOCARPINE IN MIDWIFERY.

IN a recent number of THE LANCET a case of premature labour induced by the administration of pilocarpine was recorded by Mr. John Clay. The action of pilocarpine on the uterus appears to have been discovered accidentally by Marsman, of St. Petersburg, while using the drug in the case of a pregnant woman suffering from dropsy. Several cases in which the oxytoxic influence of the drug was proved have been since recorded. In a considerable number of them, however, though not in all, symptoms of a disagreeable and even of a dangerous character manifested themselves. These symptoms are, elevation of the pulse and respiration, haziness of sight, coldness of extremities, retching and sickness, depression, scarcely perceptible pulse, and collapse. These symptoms are more marked in some cases than in others. In Mr. Clay's case it was at one time feared that the patient would not rally from her collapsed condition. The action of the drug on the uterus does not appear to be developed at once; it requires several hypodermic injections, for the drug has been administered in this way. Eight injections were given in Mr. Clay's case, and on the fourth day the os was found to be of the size of a halfpenny only. Then Barnes's bags were employed, and the labour completed by forceps, the subject being a deformed primipara at the seventh month of pregnancy. The means we have for inducing labour at any time now are such that we have no need for, and are hardly justified in, the use of means which manifest any dangerous symptoms. After the reports we have had from St. Petersburg and Germany of the action of pilocarpine on the pregnant uterus the profession is indebted to Mr. Clay for the account of his case reported in our columns, for it shows not only the influence of the drug on the uterus, but also its highly dangerous character. We do not think that we are justified in employing a drug possessing such feeble influence on the uterus, and exerting such poisonous effects on the system, to produce premature labour, when we have at hand thoroughly efficient and comparatively safe means.

OFFICIAL MEDICAL WORK AT SHEFFIELD.

WE have during the past two years had occasion to comment pretty frequently on the curious proclivities of those who represent the ratepayers in this town of iron and steel. For whether it be the guardians or the sanitary authority, or any other body entrusted with the supervision of subjects relating to health, the cutting-down process is put into motion on every available occasion. The sanitary authority have recently, in defiance of all reasonable precedent or common sense practice, given their medical officer of health his *congé* on the most unworthy and frivolous pretext, and appointed a successor at half the salary, who is *not* compelled to devote all his time to the duties of the office, although the town contains about a quarter of a million of inhabitants, and is famed for its dirty and dingy courts, alleys, and bye-streets. A few months since an amusing discussion took place at (we think) the board of guardians about chlorodyne and other so-called expensive medicines, when the penny-wise and pound-foolish policy was again propounded. And now, quoting from a copy of the *Sheffield Daily Telegraph* that appeared on the 30th ult., it seems that Mr. Alfred Reckless, one of the union medical officers, has been compelled to resign, because "the remuneration was exceedingly out of proportion for the work he had to do," the board declining "to consider the matter." We are becoming tired of drawing the attention of our readers to this disgraceful state of things in one of the most important and richest towns in the kingdom, but do so again chiefly for the purpose of registering a hope that the medical men at Sheffield will follow the example of those at Yarmouth, and, the "prevailing distress" notwithstanding, decline, each and all, to take office as Mr. Reckless' successor. We are credibly informed that the resignation of this gentleman is a source of regret to some of the guardians, and if his *confrères* in the town would treat the parochial advertisement for a successor with silent contempt, the Sheffield guardians may yet be brought to their senses.

BURNING THE DEAD.

MR. SECRETARY CROSS has encouraged the hope that nothing so imbecile as an adoption of the heathen practice of burning the dead will be tolerated in England. The perils of such a procedure are manifest, and have been sufficiently exposed. Nothing could possibly be easier than to destroy the traces of poisoning, and, indeed, of death from violence in every form, if cremation were allowed by the law of the land. It is passing strange how the danger of even *permitting* the recourse came to be overlooked. Obviously, not only would the presence of poison be undiscoverable, but the traces of internal injury and many methods of murder would be lost, if the body of a dead person were destroyed by fire. Crime would be rampant if the means of hiding it for ever were thus placed at the disposal of evil-doers. It is not easy to discover how this project came to be seriously entertained or discussed. The Hon. Francis Scott and those who joined him in the recent protest against the establishment of a cremation-pyre near Woking—the thin end of the wedge—have done good service to the public, and deserve better thanks than they have yet received.

"TIME NIHIL."

IF the Seamen's Hospital Society have not yet adopted the above words as their motto, we conjure them to do so forthwith. We observe they still, very properly, in their own interests, keep to the "Dreadnought" as a title with which the public, and specially the nautical public, have for many years been familiar. It is announced that at the next annual meeting, which will be held at Willis's Rooms next Wednesday afternoon, H.R.H. the Duke of Edinburgh has promised to take the chair, and we hope that the requisite funds to meet the somewhat heavy annual expenses will be forthcoming on the occasion. For we may remind our readers that the hospital is now more than half a century old, and some six years ago we took occasion to remark that "the claims of this Society to aid and sympathy are universal and cosmopolitan." We say so still, for the Committee of the Society, acting in concert with public opinion, have since that date reorganised the system of internal administration, and thus have economised the funds, increased the importance of the old institution, and restored harmony among the members of the staff, lay and professional. The sum of £12,000 for expenses seems, however, very large, and almost needs epitomising. But the Distribution Committee of the Hospital Sunday Fund are so just in their awards, that the large sum received by the Seamen's Hospital from that fund must,

of course, indicate great economy in the "management" expenses—an economy, in fact, that was inaugurated some five years ago, and, as we hope, still exists in its entirety. If not, the sooner Dr. Glover's motion brought forward at the Hospital Sunday Fund meeting is carried and takes effect the better for the interests of this now popular hospital.

THE REGISTRATION OF DISEASE IN LEICESTER.

THERE must surely have been some blundering management on the part of the Corporation of Leicester that a proposition on its part, to include in an Improvement Bill for the borough, which is to be promoted during the coming session of Parliament, provisions for the local registration of certain diseases, should have excited the medical profession in the town to well-nigh unanimous opposition. The corporation would have done well, at least, to reconsider the provision which would make the medical man as well as the householder responsible, under penalty, for reporting the facts as to the occurrence of the diseases for which registration is sought by the local authority. We anticipate that this will prove the chief stumbling-block to the success of these local Bills, and we believe it to be unnecessary. However, the experiment is being tried in more than one place, and if the Leicester Corporation thinks fit to add another test example, in spite of the opposition of the practitioners there, and if it is successful in getting its Bill through Parliament, we may hope the sooner to obtain trustworthy practical experience, in place of speculative arguments, on the subject.

PUERPERAL FEVER IN PRUSSIA.

A COMMITTEE, appointed by the Obstetrical Society of Berlin to draw up regulations for the prevention of the spread of puerperal fever, has laid a report upon the subject before the Prussian Minister of Public Health, which has since been published. Dr. Charles Underhill has translated the report, which contains statistics of deaths during pregnancy and childbed and from puerperal fever in Berlin, and of deaths during pregnancy and childbed in Prussia, with calculations for the rate of mortality from puerperal fever. These figures show that the rate of mortality in pregnancy and childbed is considerably greater in the whole of Prussia than in Berlin. The committee conclude that "Puerperal fever carries off fewer women in Berlin than in the whole of Prussia." This result is very remarkable, as it is generally believed that childbed fever is far less frequent in the country than in town. The report further states that "no registration district and no province in the country escapes from childbed—that is to say, from puerperal—fever"; and "that this public calamity bears, in the provinces of the State, the scarcely credible proportion of 10 to 15 per cent. to the total mortality." Puerperal fever is the result of septic infection brought about by decomposition of the mother's own secretions and excretions, or introduced from without into the female genital canal by the fingers or instruments of the midwife or physician. They recommend that frequent examinations should be avoided, as they tend to hasten decomposition of the secretions; disinfecting injections should be used in all cases of prolonged labour, thorough disinfection of the hands in all cases before making a vaginal examination.

In order to avoid the spread of fever when cases of it have occurred, they advise that it should be by law incumbent upon all medical persons to report to the sanitary authorities any such case; midwives and physicians to report to the same authorities "any case of severe feverish disease occurring in childbed, unless it be clearly established it has no connexion with the puerperal process"; "all midwives to give notice of every fatal case which occurs in their practice," and the sanitary authorities to have power to suspend the midwife from the practice of her calling for a fixed period.

THE ROYAL STAGHOUNDS AND RABIES.

THE pack maintained under Royal patronage, and which has undoubtedly been infected with rabies, a disease of very long incubation, is still held ready to be let loose on the district. This is a most unaccountable business. The perfectly ridiculous notice that there have been no symptoms during the last few weeks has been repeated. There must be something very innocent at the heart of this announcement. After the most conclusive proofs during life, and by post-mortem examination, that certain of the dogs had undoubted rabies, it is puerile and insulting to common sense to deny or even question the existence of danger. It is beyond doubt that the risk of allowing the pack to be hunted, or even turned out this season—for fully twelve months to come—is apparent. It is necessary to protest warmly and strongly against the peril of public injury being incurred.

AN UNSAVOURY SUBJECT.

DIFFERENCES of opinion—unaccountable, certainly—exist as to the expediency of eating diseased meat. The very notion of knowingly feeding on morbid flesh is so revolting that it might have been supposed a unanimous objection would have been taken to the proposal, and the utter destruction of bodies of beasts killed because infected required as the first condition of decency. Such, however, is not the fact. There are those among us who hypothecate the innocuous character of the flesh of animals so diseased, and recommend, if they do not themselves practise, the economy of consuming it. We do not, however, remember to have heard the most adventurous sanitarians assert the wisdom of devouring pork affected with typhus or typhoid. It would therefore be interesting to know what has become of the carcasses of fifty-eight swine said to have been infected with "typhus fever" in the county of Bucks during the month of January, and slaughtered by order of the local authorities. Let any average *gourmet* ask himself what has been done with these possible sides of bacon, and then to dinner with what appetite he may! It is quite time the community made up its mind to destroy all the flesh of animals slaughtered under the Contagious Diseases Acts, and to compensate the owners.

TOXICOLOGICAL NOTES.

AN Italian journal records a case in which, in a child two years of age, the administration of a grain and a half of santonin (ten centigrammes) was followed by convulsions beginning in the face and extending over the whole body, with dilatation of the pupils, hindrance to respiration, and urine coloured by the drug. The most efficacious therapeutic measure was found to be artificial respiration whenever paralytic asphyxia threatened. The convulsions continued for three days, gradually lessening. It is difficult to believe that the dose of santonin was not by error larger than was intended. The case is, however, instructive in respect to the therapeutics of santonin-poisoning, since further experiments on animals, suggested by it, showed that the most potent means of combating the effects was by artificial respiration, that the convulsive attacks were best treated by inhalation of ether, and the elimination of the poison furthered by purgatives and abundant drinks.

Instances of poisoning by chlorate of potash are very rare. In one case on record, seven drachms were taken at once by mistake, and caused the death of an adult. Another instance has just been recorded in Germany. Some

of this substance was being given daily to some children of a medical man as a prophylactic against diphtheria, then epidemic. One day the children, three in number, obtained the stock of crystallised chlorate, and commenced playing "doctor," and took altogether between three and four drachms. The youngest, aged two years and a half, began quickly to vomit, and continued to do so till her death, seven hours later, with symptoms of acute gastritis and great somnolence. The others recovered. In a case recently recorded, five-grain doses of chlorate, continued for a considerable time, caused almost constant gastritis.

A curious case of tobacco-poisoning is recorded in France. A woman, by the advice of a midwife, gave to a child, aged eighteen months, suffering from oxyurides, an injection consisting of a decoction of two cigars. Some minutes afterwards the child began to vomit, and became convulsed. Half an hour later it was in a state of coma, interrupted now and then by convulsive movements. The pulse was frequent and feeble, the extremities cold, respiration irregular, and the pupils contracted. The symptoms lessened after injections of warm water, warm baths, and ammonia, and next day the child was pretty well. The two cigars contained about two drachms and a half of tobacco.

THE TOTTENHAM SANITARY ASSOCIATION.

THE Tottenham Sanitary Association has issued its annual report for 1878. This is the fifth annual report published by this excellent body. It does not give so favourable an account of progress in sanitary matters in Tottenham as did previous reports, but it brings out in a clear light the importance of associations of this kind being established in sanitary districts. The death returns for the year show that scarlet fever, diphtheria, and typhoid have been prevalent to an extent and under conditions which prove that the Authority has yet much to learn. Indeed, it may reasonably be inferred that but for the exertions of the Sanitary Association in endeavouring to keep the ratepayers alive to their sanitary interests and in stimulating a sluggish authority in the exercise of its functions, Tottenham would in 1878 have fallen back into a state of unhealthiness which has more than once called for the interference of the Government.

VASO-MOTOR NERVES.

MM. DASTRE and MORAT have recently read two papers on the Vaso-motor Nerves before the Académie des Sciences. Their experiments were ranged under two series: in one they studied the effects of section and stimulation of the nerve in a chloralised animal; in the other the effects of stimulation of the nerve previously divided in an animal not under the influence of chloral. They found that section of a nerve is immediately followed by a transient rise of both arterial and venous pressure, the cut acting just in the same way that a stimulus to the heart might be supposed to do—that is, it causes a rise of pressure throughout the vascular system. After this the pressure gradually falls in the artery, and rises to a corresponding extent in the vein, until a new equilibrium is established. The permanent effect is dilatation of the vessels of the region supplied by the divided nerve. If the distal extremity of the cut nerve be now stimulated, the pressure rises gradually in the artery and falls in the vein; but whatever may be the strength or duration of the current, the pressure soon returns to the state which existed after the section. Similar results appear to have been obtained in the unchloralised animal; and the authors thence come to the conclusion that the sympathetic nerve and its branches play the part of vaso-constrictor nerves, and that it is unnecessary to assume the presence of vaso-dilator fibres.

IS PASSANANTE INSANE?

TO answer this question a commission of three Italian experts has been appointed—Professors Tommasi, Buonomo, and Tamburini. The Cavaliere Ferri, President of the Court of Assize, requests their opinion as to the value of the advocate Tarantini's assertion, that Passanante is affected with chronic lypemania. Among other data on which they will proceed will be the manuscripts of the would-be regicide. Professor Tommasi, we believe, has at this moment in the press an elaborate treatise on lypemania; while Professor Tamburini has recently published an article on the same disease in the "Enciclopedia Medica Italiana." A very interesting and instructive investigation is expected at the hands of the three distinguished alienists.

"MISADVENTURE," OR MALADMINISTRATION.

THE *Shipping and Mercantile Gazette* of the 28th ult. reports as follows:—

"An inquest was held yesterday at Ryde on the body of a seaman who had died from taking a dose of carbolic acid, given him by the steward of his vessel, the *Standard*, weather-bound at the Motherbank, in mistake for a black draught. The deceased's name was David Muir, aged forty-three, and he, feeling unwell, applied for medicine. The captain was in the habit of giving black draughts, and the steward went down to the locker to get some, but mistook the jar, and brought up carbolic acid, which he administered to Muir, who died shortly afterwards in great agony. The jury returned a verdict of 'Accidental death,' and censured the captain for keeping carbolic acid with medicine."

What has the Board of Trade to say to this very serious accident? We pause for a reply.

THE Executive Committee of the Medical Council met on Friday, January 31st. The business had reference chiefly, we believe, to new arrangements in the office. At the meeting of the Council in July power was given to the Executive Committee to make such changes as it might think desirable. The Executive Committee empowered the registrar to obtain additional assistance. We believe that the Committee further resolved to inform the present clerks that, under the new arrangements, their services will not be required; but that, in consideration of their long connexion with the office, their salaries will be paid till Midsummer, and one half of their salaries for two years from Midsummer next. The clerks have been connected with the office since its creation in 1858, and we can testify to their constant courtesy.

AT a meeting of the Council of the Poor-law Medical Officers' Association, held on the 4th inst., it was resolved, that this Council, having had before them a copy of the correspondence between the Woburn Board of Guardians, the Local Government Board, and Dr. Macdonald, beg to express their approval of the public-spirited conduct of Dr. Macdonald in preferring to resign his appointment as medical officer to the Woburn workhouse, rather than submit to the new reading by the Local Government Board of the two-hundreth clause of the General Consolidated Order; whereby it is sought to be established that a medical officer is required to inform the guardians of his intention, and to obtain their consent whensoever private or other business necessitates his temporary absence from his duties, notwithstanding he may have provided a legal substitute to fill his place.

OUR correspondent at Birkenhead writes:—"The annual meeting of the governors of the Birkenhead Borough Hospital was held on January 27th, at the Music Hall. Mr. T. H. Jackson presided. The honorary secretary read the

report of the Committee, from which it appeared that the institution was in a high state of efficiency. The chairman of the Weekly Board (the House Committee) moved 'that the period for the re-election of the honorary medical officers be extended from fifteen to twenty-one years from the date of the appointment, or to sixty years of age.' This motion was, in fact, a proposal to alter two of the laws of the hospital—Law 10, providing 'that no honorary physician, surgeon, or dentist, shall be re-elected oftener than to complete a period of fifteen years' service from the date of his appointment'; and Law 13, directing 'that every honorary medical officer on the expiration of his fifteen years' service shall become a consulting medical officer of the institution.' The motion was, after some discussion, carried. Dr. Stevenson was re-elected physician, and Drs. Lambert, Bowen, and Spratly surgeons. Had the motion brought forward by the chairman of the Weekly Board been lost, three of these gentlemen would have had to retire from length of service. As it is, they will be able to retain office for another six years."

DEPUTY SURG.-GENERAL J. M. S. FOGO has been placed under orders for India, and will relieve Surgeon-General L. Stewart as Principal Medical Officer of the Bombay Army. Dr. Fogo, on his return from Malta, succeeded Sir Anthony Home, V.C., as head of the Statistical Branch of the Army Medical Department, Whitehall-yard.

HOSPITAL SUNDAY at Birkenhead has been fixed for April 20th, and the ministers of the various churches and chapels in the borough have been asked to make their annual collections in behalf of the local medical charities as far as practicable on that date.

IN the *Gazette* of the 4th inst. was published an Order in Council, giving the regulations of dairies, cow-sheds, and milk-shops, which the Privy Council is empowered to make under the Contagious Diseases (Animals) Act.

THE current number of *Temple Bar* contains a pleasantly written article on "Literature and Medicine."

THE PLAGUE IN RUSSIA.

THE later official reports of the progress of plague in the province of Astrakhan seem to show that the outburst which has alarmed Europe is for the moment at an end, and that at present scattered cases of the disease alone occur in various places. At Vetlianka and the neighbouring villages on the right bank of the Volga no cases of plague existed on the 28th January. The disease is reported also to have ceased in the two villages where it had appeared, at that time, on the left bank of the Volga. The cases reported at Selitrenja, on the left bank, or, rather, on the banks of the River Achtouba, which runs parallel with the lower Volga, east of the great stream, were nine in number, all fatal. The first two cases attacked in this village were two peasants who arrived there from the infected district on the right bank of the Volga, and who appear to have been ill when they reached Selitrenja.

The Russian Medical Society, St. Petersburg, held a special meeting on the 23rd of January, to discuss the subject of plague with reference to the present crisis in Russia. No less than 800 persons were present at the meeting, and among the distinguished scientific individuals present were Professors Bogdanovsky, Slaviovsky, Péléchine, Sorokine, Madame Koschevarow-Roudniew, and M. Tchistovitch. Professor Botkine presided. At the opening of the meeting an incident occurred worthy of note. A telegram from Dr. Pirogow was read, addressed to the Society, in answer to congratulations which had been sent to him on the occasion of his having reached the fiftieth year (the jubilee) of his active medical life. After this, Professor Botkine proceeded to the immediate business of the meeting. Describing the outbreak in Astrakhan, he expressed the opinion that, notwithstanding official reservations, the disease which had excited so much alarm there and in Russia generally was not a European malady, but was plague, known as the Indian plague. He further said that the disease described as existing in Astrakhan province was the most formidable variety of the malady—namely, the kind known in history as the "black death," and which caused such formidable ravages in Europe in the fourteenth century. He also expressed the opinion that the malady had been introduced into Russia from Resht, in Persia, where plague was prevalent in 1877. Dr. Monastyrsky followed, and gave a summary of a work by Dr. Schafovsky on the great epidemic of plague in Moscow in 1770-71. Next, Dr. Nicolaiew described the symptoms of plague, and the conditions of prevalence of the disease, and, in concluding, expressed the opinion that "quarantines tend to precipitate the progress of the malady rather than to impede it; they exercise a mischievous influence upon populations, without furnishing the possibility of a complete isolation of the sick." Dr. Bogomolow then read a report on the causes of plague; and Dr. Vinogradow followed with a report on the pathology of the malady. Dr. Tchérepuine described the sanitary measures requisite in dealing with outbreaks of plague, and, as Dr. Nicolaiew, protested against quarantines. The proceedings terminated with the reading of a report by Professor Tchoudnovsky, in which he maintained the proposition that "plague is absolutely curable." He affirmed that if ordinary sanitary precautions are taken, plague is not more fatal than typhus. The first duty of the physician, he said, is to impress the patient with this hopeful view, so as to ward off that mental depression which is the result of the common belief that plague is almost necessarily fatal—an impression which, Dr. Tchoudnovsky holds, renders a case desperate. The prophylactic measures in cases of plague are the same as are found effective in typhus—to wit, isolation of the patient, free ventilation, the removal of all sources of atmospheric pollution, especially from excremental matters, the destruction of the dejections, and, he adds, the use of a bath at 20-25° C. (68-77° F.) Further, he recommends, as to treatment, the use of cold baths, of cold injections, and even of ice in the rectum, with chlorinated water internally; and expresses a belief in the efficacy of quinine in strong doses. If the patient is accustomed to alcoholic drinks he would continue their use, but he recommends the greatest prudence in the use of narcotics, and would interdict blisters, leeching, and cupping.

It is reported from Berlin, under date the 31st January, that the German Government has interdicted importations from Russia. The commission appointed to consider measures of protection against plague as affects Germany, aided by Professors August Hirsch and Pettenkofer, appear to have completed their work. It is reported that Dr. Hirsch, with other German and Austrian medical men, will proceed at once to Russia to study the plague in Astrakhan province.

Roumania and Italy have both adopted precautionary quarantine measures with a view of preventing introduction of plague into their ports.

Official news from Astrakhan to the 28th January states that plague had practically disappeared from the province; in other words, no fresh cases had been reported for more than twenty-four hours. Among the latest reported deaths was a sister of charity—Sister Dobrinine,—who had volunteered for service in Vetlianka, and who appears to have been very quickly struck down with the disease. On the recommendation of a Committee of Ministers, approved by the Czar, instructions have been issued for the burning of the village of Vetlianka, and of other infected villages if thought necessary, the inhabitants being removed elsewhere and fully compensated out of the Imperial funds. A medico-sanitary commission in Moscow have recommended the erection there, in view of the possible introduction of plague, of a building to contain 2000 people (whether the sick or the well from infected houses does not appear), the distribution of cooked provisions to the poor, the disinfection of infected places, and the erection of furnaces at the hospitals for the purpose of burning the linen and clothes of the sick, the inspection of restaurants, and the closing of unhealthy basements. Count Louis Malikoff has been despatched to Astrakhan to act as Governor-General of the province, with extraordinary powers, during the crisis.

The German and Austro-Hungarian Governments have prohibited the importation from Russia, into their respective countries, of linen cloths, rags, furs, skins, Sarepta balsam, felt, and waste-paper. Railway carriages on the Russian section of the Russo-Austrian railways are to be disinfected at the frontier; of the Russo-German, the carriages will not be permitted to cross into Germany.

The Roumanian Government has voted 500,000 francs for the expenses of establishing a military cordon and quarantine on the frontier; the Italian Government has convoked a Sanitary Council to consider the further precautions to be taken against plague; and the Turkish Government has determined to impose quarantine at the entrance of the Bosphorus on arrivals from Russian ports in the Black Sea. It is further reported that the Russian Government will communicate to the various powers of Europe an account of the measures it has taken, with a view to elicit their opinion, and to promote concerted action where this may be held desirable.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE Registrar-General has just issued his Quarterly Return relating to the last three months of 1878, which not only records the effect upon the mortality of the cold weather that prevailed during the greater part of November and December last, but supplies the necessary facts for calculating the vital statistics for the whole year. It appears that the annual death-rate in England and Wales last quarter was equal to 22·6 per 1000 of the estimated population, which, although showing a marked excess upon the rates that prevailed during the exceptionally mild autumn quarters of 1876 and 1877, only exceeded by 0·8 per 1000 the average rate in the fourth quarters of the ten years 1868–77. Comparison with the rates of mortality during the mild last quarter of 1877 affords the means for estimating the effect of low temperature upon mortality under different circumstances. The Registrar-General points out that the general mortality last quarter exceeded by 12·4 per cent. that which prevailed in the corresponding period of 1877; in other words, that, in equal numbers living, 1124 persons died last quarter instead of 1000 in the last three months of 1877. The excess in the mortality of males did not exceed 10·3 per cent., while the excess of female mortality was equal to 11·4 per cent. The increase of mortality due to cold was greater in country than in town; it was equal to 12·8 per cent. in the rural districts, whereas it was but 11·7 per cent. in the urban districts. As might be expected, the effect of the low temperature told very unequally upon the population at different ages. The cold appears scarcely to have affected the mortality of infants and young children, and only to have caused a moderate excess among young adults, whereas the main effect of the cold is to be observed in the death-rate of elderly persons. The increase of mortality attributed to the cold scarcely exceeded 8 per cent. among children and adults under sixty years of age, whereas among persons above that age the mortality showed an excess of 24·7 per cent.

The local death-rates last quarter showed fully as wide variations as usual. The country rates ranged from 18·9 in the extra-metropolitan portion of Surrey, and 17·0 both in Huntington and Dorset, to 25·1 in Stafford, 25·2 in Warwick, and 29·0 in Lancashire. The defective sanitary condition of Lancashire and its neglect of public health are reflected not only in the high general death-rate, but also in startling rates of infant mortality, and in excessive fatality of zymotic diseases. The death-rate last quarter from the seven principal zymotic diseases in England and Wales was below the average, although the fatality of scarlet fever was excessive, and that of enteric fever and diphtheria showed an increase. Small-pox caused but 126 deaths last quarter in England and Wales, being the smallest quarterly number on record; and of these no less than 118 occurred in London and the home counties, while but eight were returned in the rest of England and Wales. Perhaps the most unsatisfactory feature of the present return is the increased fatality of enteric fever, which especially prevailed in Portsmouth, Shrewsbury, St. Helens, Barrow-in-Furness, Peterborough, Ipswich, Widnes, and Blackpool.

HEALTH OF LARGE ENGLISH TOWNS IN THE FIFTH WEEK OF 1879.

DURING last week 5484 births and 3778 deaths were registered in twenty of the largest English towns. The births exceeded by 302, and the deaths by 408, the average weekly numbers during 1878; the deaths showed an increase of 61 upon those returned in the previous week. The annual death-rate in the twenty towns, which had been equal to 28·1 and 26·3 per 1000 in the two preceding weeks, was 26·7 last week. During the past five weeks of the current quarter, the death-rate in these towns has averaged 27·5, against 22·5 and 25·4 in the corresponding periods of 1877 and 1878, and was higher than in the five corresponding weeks of any year since 1875, when it was equal to 29·2. The lowest death-rates in these towns were 16·9 in Plymouth, 18·6 in Portsmouth, 19·1 in Leicester, and 19·9 in Bradford; the highest were 28·5 in Salford, 28·8 in Newcastle-upon-Tyne, 29·3 in Nottingham, 30 in Hull, 34·9 in Manchester, and 35·7 in Liverpool. The high death-rates in Manchester and Liverpool appear to have been mainly caused by the excessive fatality of lung diseases. Diseases of the respiratory organs and phthisis caused an annual death-rate of 18·0 per 1000 last week in Liverpool; in London, however, the rate from these diseases did not exceed 10·4. To the seven principal zymotic diseases 393 deaths were referred in the twenty towns last week, against 397 and 444 in the two preceding weeks; they included 120 from whooping-cough, 113 from scarlet fever, and 41 from fever, all of these numbers being considerably below those returned in recent weeks. The annual death-rate from these diseases averaged 2·8 per 1000 in the twenty towns; no death from these diseases was recorded in Brighton, Portsmouth, Norwich, or Plymouth, whereas the zymotic death-rate in the other towns ranged upwards to 5·0 in Salford, and 6·0 in Newcastle-upon-Tyne. The returns show a general decline in the fatality of scarlet fever, although it was again excessive last week in Salford, Birmingham, and Newcastle-upon-Tyne. Small-pox caused 28 more deaths in London, but not one in any of the nineteen large provincial towns.

Correspondence.

"Audi alteram partem."

THE CONTAGIOUS DISEASES ACTS.

To the Editor of THE LANCET.

SIR,—I have read, with considerable surprise, in THE LANCET of Feb. 1st, that "it is much to be regretted that the Army Medical Department do not publish a vigorous and exhaustive statement, year by year, as to their official experiences in connexion with the Contagious Diseases Acts." Permit me to point out that ever since these Acts came into operation a statement has been published annually in the "Army Medical Department Reports" showing the prevalence of primary venereal sores and gonorrhœa at the stations of troops which are under the Acts compared with those not under the Acts. In the volume for 1872, in addition to the annual statement, there was reprinted a complete summary of the information for eight years—1865–72—which I had prepared for the information of the Secretary of State for War, and which was laid by him on the table of the House of Commons. But the article referred to appears to consider this information to be incomplete, because "all cases admitted in the list are included as if contracted in the place from which the report is dated." Now, for this course I am responsible, as having been the head of the Statistical Branch when these returns were first instituted, and I desire to state the grounds on which this was done. In the quarterly return of admissions for primary venereal sores and gonorrhœa, which was established with a view to ascertain the working of these Acts, two columns were inserted, if I remember rightly, at the suggestion of the police authorities, headed respectively, "stated to have been con-

tracted in the district," and "stated to have been contracted out of the district." These returns had not been long in operation before I had reason to believe that these "statements" were very often not to be relied on; that the men made incorrect statements with a view, as we believed, to put the police on a wrong scent; and a careful inquiry satisfied me that this was so often the case that I should not be justified in drawing any conclusions from them. My sole object was to ascertain as correctly as possible, for the information of the authorities, the true influence of these Acts upon the health of the troops; and I felt that this was more accurately shown by the undoubted figures of the admissions into hospital than by these modified by the more than doubtful statements of the men. The circumstance noted in your article in connexion with Sheerness is probably correct, but as such cases would appear as transfers, not admissions, they would not be included in the Sheerness returns; and Windsor was one of the stations at which careful inquiry led us to doubt the accuracy of the statements made by the men—nay, where, I may say, we were satisfied they were in some instances intentionally misleading. To have deducted a number of cases from the returns in consequence of these statements would doubtless have given results more favourable to the working of the Acts, but they would have been results on which I could not have relied. If there is any unavoidable error in the case I should prefer it to tell in favour of the opinions to which I am opposed, rather than of those which I support. But I believe the error is much less in the statistics formed in the manner I adopted, than it would be in that suggested in your article.

I am, &c.,

Feb. 4, 1879. T. GRAHAM BALFOUR, Surgeon-General.

THE APOTHECARIES' SOCIETY *VERSUS* SHEPPERLEY.

To the Editor of THE LANCET.

SIR,—Much has been written and said in reference to this case, which a full knowledge of the facts would have caused to be left unwritten and unsaid. We have hitherto entirely refrained from commenting on the case in the public papers, but the remarks in your issue of the 1st inst. lead us to break silence. You say "it was a badly managed business from the first, and, as a test action, practically useless." Allow us to state a few circumstances which may lead you and your readers to a different conclusion. The action was brought to put an end to a very extensive system of counter-practice, and evidence was obtained in four cases, two of them being what, for the sake of convenience, we may term "serious," and two "simple," for there was no intention in the first instance of making the case a test action as to "simple" complaints. When the action was tried in the county court the witnesses who were to prove the "serious" cases flatly contradicted their previous statements, upon which the plaintiffs had relied, and thereby defeated that part of the plaintiffs' case. Notwithstanding this, however, and notwithstanding also that the plaintiffs were accidentally deprived of the benefit of another witness (Hubbard), who, just when he was required and would have proved a *bonâ fide* case, was giving evidence in an action being tried at the assizes, the judge was so satisfied with the evidence of Death, the detective, and with the admission of the defendant himself as to the particular cases alleged, and also as to his general practice, that he, in the most unhesitating manner, found for the plaintiffs. This result will perhaps be considered a sufficient answer to your remark that "it was a badly managed business from the first."

Then came the order for a new trial, after which the plaintiffs were unable to stop the case, except upon payment of the defendant's costs. Before proceeding with it, however, the opinion of Mr. Day, Q.C., was taken, and that gentleman strongly advised the further prosecution of the action. After that it was found that Hubbard had gone to America, so that the plaintiffs were forced into court with merely the evidence of Death and the defendant.

With the plaintiffs' case so weakened, and with the strong prejudice of the jury against the action, it is not matter of much surprise that the verdict was for the defendant.

Mr. Baron Pollock's summing up, however, was entirely in the plaintiffs' favour on the point of law, and, therefore, to a great extent, the object of the action has been achieved.

We are, Sir, your obedient servants,

THE SOLICITORS OF THE NOTTINGHAM MEDICAL DEFENCE ASSOCIATION.

Nottingham, Feb. 4th, 1879.

Obituary.

W. THOS. HURD WOOD, M.R.C.S.E., L.R.C.P. EDIN.

WE much regret to announce the death of this accomplished member of the profession, which occurred at sea off the island of St. Helena, on December 30th, on board the Royal mail steamship *Durban*, one of the Union Company's line between South Africa and Southampton. Mr. Wood studied at Guy's, was for some months a resident on board the *Dreadnought* hospital ship, then moored off Greenwich, gained his diplomas in 1864 and 1868, and held appointments successively at the Children's Hospital in Great Ormond-street and at Brighton. Having tried private practice and found it eminently distasteful, he made several voyages to the Cape as medical officer in the service of the Union Steamship Company, and having married, obtained in the autumn of 1872 the post of acting resident surgeon at the West Somerset Hospital, Capetown, one of the best of our colonial establishments. He was shortly afterwards confirmed in that appointment, and was re-elected after the prescribed interval of five years. Some two years ago he unfortunately became the subject of syphilis, acquired by dressing a venereal patient at the time that he had a wounded hand, and from this affection most unhappily suffered very severely. He obtained leave of absence, and came home in the spring of 1877 in a sadly pitiable state from blood-poisoning, but recovered to a great extent, and returned to work at the Cape towards the close of the same year. But this unfortunate victim to professional energy found that the poison had taken a hopelessly firm grip, and after various minor breakdowns and much anxiety on account of administrative matters in connexion with the hospital (of which he had sole administrative charge), Wood was compelled to ask for another term of leave, but was so utterly worn out by the disease that, having made a second start for England, he sank almost continuously from the time of departure from Cape Town, and, after much suffering with frequent delirium, died as the vessel reached St. Helena.

Wood was an accomplished man, and a good surgeon, and it is sad to know that a promising career was thus closed at the early age of thirty-nine. The appreciation in which he was held at Cape Town is best attested by the fact that on the eve of his second departure some few weeks ago an address was presented to him by the chiefs of all religious denominations, indicating in complimentary terms their grateful sense of the administrative energy and skill as well as kindness displayed and practised by him in superintending the arrangements of so large and important an institution as the West Somerset Hospital. Many of his old *Dreadnought* and other *confrères* were glad in their travels to meet a man whose former companionship was always associated in their minds with many pleasant memories. For such a man the ocean is a fit resting-place.

EDWARD HOLLAND AMBLER, F.R.C.S.,

OF HEMEL HEMPSTEAD.

THE lamented death of Mr. E. H. Ambler has removed from amongst us one of the best-known practitioners in Hertfordshire. Possessed of a vigorous constitution, he was engaged in the active pursuit of a large practice until within a short time of his death. He was born in the year 1821 at Starcross, in Devonshire, and was the second son of the late Rev. Richard Ambler, of Hardwick, an estate in the parish of Norbury, Salop, which has been in the possession of the family for upwards of 400 years. Mr. Ambler received his medical education at the Middlesex Hospital, qualifying in 1843, and always entertained the strongest affection for his *alma mater*, interesting himself in its work,

and constantly attending the various annual social gatherings of past students in connexion with the hospital. After serving as an assistant in a practice in Stalbridge, Dorsetshire, for some years, he left that place in 1852 to take up practice at Hemel Hempstead. On leaving Stalbridge he was presented with a testimonial, valued at £70, as a "parting token of esteem for his professional and personal character." At Hemel Hempstead he obtained the leading practice, and in 1852 was elected surgeon to the West Herts Infirmary, an institution to which Sir Astley Cooper was once honorary surgeon. A new infirmary was built about two years ago, and the old building has been secured by King's College Hospital as a Convalescent Home. Mr. Ambler, in his capacity of surgeon to the infirmary, frequently had occasion to perform capital operations, amongst which may be mentioned sixteen cases of lithotomy, all successful, cases of successful ligature of the subclavian, common carotid and external iliac arteries, and on one occasion he extirpated the parotid gland. He was a bold and skilful surgeon. His other public appointments included those of surgeon to the Old Manor Lodge, the Society of Foresters and other clubs, and medical officer to the Union and Parish of Hemel Hempstead; and for many years he had been an active member of the Committee of the British Medical Benevolent Fund, of which he was the honorary local secretary. To all these public duties connected with his profession was added, in 1876, the dignity of High Bailiff of Hemel Hempstead—an office which he served with credit.

For thirty-four years Mr. Ambler worked unremittingly at his profession, throwing into his labour all that zeal and energy of which he possessed no small share. His personal qualities gained for him many friends, for he was characterised by a geniality and generosity of temper, with a hearty, bluff outspokenness of manner that were refreshing to meet with, and throughout life he retained not a little of the warm enthusiasm of youth. Old students of the Middlesex Hospital, from the time at which he entered to the present, all knew him, and will all miss his cheerful and encouraging example. As we write we hear of instances of his kindness and generosity to the struggling and the poor, as well as to the younger members of our fraternity, with whom he was brought in contact. Good deeds done in silence need not be proclaimed upon the house-tops. But that those who were benefited did not forget the doer was amply shown when death came to break the link between them. The whole town of Hemel Hempstead mourned at his death, which took place on January 11th. At the funeral on the 17th the new cemetery on the hill above the town, and facing the infirmary which is so associated with his name, was filled by a large concourse of townsfolk and villagers. No fewer than 2000 people were estimated to have been present, amongst them several of the gentry of the neighbourhood, and all the medical men from the surrounding country, who had come to pay a last tribute of respect to one who could claim to be—although not sixty years of age—almost the oldest practitioner in the district; for he died, as so many of our profession do, in the prime of life, partly from the natural results of a hard-working career with but little relaxation, but also more directly from injuries received in the actual discharge of duty. Thus, in the course of his practice he met with many and serious accidents; and seldom does it fall to the lot of the practitioner in civil life to be so frequently disabled. Sixteen years ago he was thrown from his horse, and sustained a fracture of the base of the skull; for several days cerebro-spinal fluid escaping from the ear. On other occasions also he fractured the leg, collar-bone, and nasal bones; and at one time he received an extensive wound in the upper part of the thigh, laying bare the femur, and narrowly missing the femoral vessels, produced by a kick from a horse. These and other injuries he sustained in riding to see his patients. Then four years ago a poisoned wound in the finger was followed by cellulitis of the arm and axillary abscess, which disabled him for five months; whilst finally, in August last, a wound of the thumb was followed by septicæmic symptoms of a grave character. He was never the same from this time, although he resumed practice; but towards the close of December he was attacked with apoplexy, from which he slightly rallied only to be struck down by a second and fatal seizure some three weeks later.

Married in 1854, he leaves behind him a widow and four children to mourn his loss. His eldest son, who received his education at the same hospital at which his father had studied before him, and who but recently took his qualifications, succeeds him in practice, in conjunction with Mr. Russell Steele, who, for some time, worked as assistant to Mr. Ambler.

JOHN BARKER, M.D. T.C.D., M.R.I.A.

THIS gentleman died suddenly at his residence near Dublin on last Sunday morning, being found dead in his bed. The deceased, who was in his sixty-third year, succumbed, it is supposed, to some cardiac affection. Dr. Barker was a graduate in medicine of the University of Dublin, and obtained, it is stated, the Gold Medal in Mathematics in 1840. Besides being an Examiner in the Royal College of Surgeons in Ireland, he held the post of Curator of the Museum, and showed considerable skill in the preparation of the numerous specimens which he executed. Dr. Barker was a skilful microscopist, and possessed a thorough knowledge of chemistry and botany, having acted formerly as a lecturer on the first-named subject in the Dublin School of Medicine, and contributed an article on Cryptogams in "Steel's Handbook of Field Botany."

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen have been admitted Members of the College:—

Blake, Henry, M.B. Lond., St. George's Hospital.
Carrington, Robt. Edmund, M.B. Lond., Loughborough-road.
Hood, Donald Wm. Charles, M.B. Camb., Green-street, W.
Khory, Rustomjee Naserwanjee, M.D. Brussels, Minford-Gardens, West Kensington-park.
Kidd, Percy, M.B. Oxford, St. Bartholomew's Hospital.

INDIAN MEDICAL SERVICE.—The following candidates for commissions as Surgeons in this Service were successful at both the London and Netley examinations, held on the 3rd inst.:—

	Marks.		Marks.
*T. H. Sweeny	5171	H. B. Briggs	4246
†D. F. Barry	5115	W. P. Carson	4235
G. F. A. Harris ..	5003	A. S. Faulkner	3836
J. Anderson	5073	C. Mallins	3834
C. J. Bamber	4618	E. M. Damla	3236
M. O'Dwyer	4604	R. M. Allen	3186
E. H. Dumbleton ..	4415	H. St. C. Carruthers	3089
C. G. W. Lowdell ..	4264		

* Gained the Herbert Prize and the Parkes Memorial Medal.
† Gained the Martin Memorial Medal.

NAVAL MEDICAL SERVICE.—The following candidates for commissions as Surgeons in this Service were successful at both the London and Netley examinations, held on the 3rd inst.:—

	Marks.		Marks.
A. M. French	3507	E. Fergusson	3176
E. H. Williams	3504		

APOTHECARIES' HALL.—The following gentleman passed the examination in the Science and Practice of Medicine, and received a certificate to practise, on Jan. 30th:—

Jones, Arthur Lloyd, Llandilo, Carmarthenshire.

The following gentlemen on the same day passed the Primary Professional Examination:—

John Chislet Culling, Charing-cross Hospital; Richard Davis Hoyle Gwilliam, St. Mary's Hospital; Henry William Payne Makeham, London Hospital.

THE Annual Report of the Directors of the Perth County and City Infirmary shows a deficiency of £704.

THE deaths registered in London last week numbered 1821, and represented a mortality rate of 26·2 per 1000. There were 28 fatal cases of small-pox, 23 of measles, 33 of scarlet fever, 14 of diphtheria, 64 of whooping-cough, 17 of different forms of fever, and 16 of diarrhœa; whilst 541 deaths were referred to affections of the respiratory organs.

PRESENTATION.—A testimonial, consisting of a silver tea and coffee service, salver, and timepiece, to the value in all of nearly £80, has been presented to Mr. Henry J. Hunt by the inhabitants of Petworth and its neighbourhood, on the occasion of his leaving the town. Mr. Hunt had practised for upwards of eight years in Petworth, and has been universally esteemed and beloved by his patients and friends.

ZOOLOGICAL SOCIETY.—At a meeting of the Council of this Society, Professor W. H. Flower, LL.D., F.R.S., was unanimously elected President, in the vacancy occasioned by the decease of the Marquis of Tweeddale.

BEQUESTS ETC., TO MEDICAL CHARITIES.—The Goldsmiths' Company have given £100 to Queen Charlotte's Lying-in Hospital. Mrs. Harvey, of Shanklin, has given £200 to the Royal Isle of Wight Infirmary, Ryde. The Sheffield General Infirmary has become entitled to £334 under the will of Mr. Henry Fisher, of Grange.

ROTHERHAM HOSPITAL AND DISPENSARY.—The report of the committee of this institution, read at the annual meeting of its subscribers and friends, whilst it had to note with satisfaction the fact that the contributions of workmen, and the sum derived from collections in places of worship, had been in excess of that of 1877, had also to record that the expenditure had exceeded the income by £114 15*s.* 3*d.* The amount of medical relief afforded by the hospital, however, had been much larger in the past year than in the previous one.

AID TO THE INJURED.—An ambulance centre, for the instruction of the railway *employés* in the first treatment of the injured, has been opened at Rugby station, by permission of the directors of the London and North-Western Railway. Dr. Bucknill and Dr. Simpson, the local medical advisers of the Company, have consented to instruct the classes, in accordance with the prescribed Syllabus of the Order of St. John, and the pupils will be examined by one of the London surgeons acting for the Central Committee. Major F. Duncan, R.A., and Mr. J. Furley explained to the men the object of the movement.

Medical Appointments.

BUCK, J. S., M.R.C.S.E., has been appointed Junior Assistant Medical Officer to the Three Counties Lunatic Asylum, Arlesey, Beds, vice Kebble, resigned.

COLLINGE, Mr. T. A., has been appointed Public Analyst for the Borough of Rochdale, at 6*s.* per analysis.

COLTART, W. W., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Epsom and Ashtead District and the Workhouse of the Epsom Union, vice Stilwell, deceased.

CONNOLLY, W. R., M.B., L.R.C.S.I., has been appointed a Medical Officer to the Workhouse and Fever Infirmary of the Waterford Union, at £100 per annum, vice Elliott, resigned.

COOPER, J., F.R.C.S.Ed., has been appointed Medical Officer of Health for the Erpingham Rural Sanitary District.

FOOTE, H. D'Oyley, M.D., M.R.C.S.E., has been reappointed a Surgeon to the Rotherham Hospital and Dispensary for seven years.

GERRARD, W. A., M.R.C.S.E., L.S.A.L., has been appointed a Surgeon to the Rotherham Hospital and Dispensary for seven years.

GIBSON, J. H., M.D., C.M., has been appointed Assistant Resident Medical Officer to the Whitechapel Union Infirmary, Baker's-row.

GRINDROD, J. A., M.R.C.S.E., has been appointed Medical Officer of Health for the Norden Urban Sanitary District, Lancashire.

HARKER, J., M.D., L.R.C.P.Ed., has been reappointed Medical Officer of Health for the Lancaster Rural Sanitary District, at £50 per annum.

JACKSON, Dr. J., has been appointed Medical Officer, Public Vaccinator, &c., for the Drum Dispensary District of the Cootehill Union, co. Cavan, at £190 per annum and fees, and £25 per annum as Medical Officer of Health, vice Jolly, resigned.

JAQUET, J. L., M.R.C.S., L.S.A.L., has been appointed House-Surgeon to the Rotherham Hospital, vice Brett, resigned.

JOHNSON, C. H., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 4 District of the Basingstoke Union, and Medical Officer of Health for the No. 4 Sub-district of the Basingstoke Rural Sanitary District, vice Sweeting, deceased.

LOWE, W. F., F.C.S., has been appointed Public Analyst for the County of Flint, at £2 2*s.* per annum, and 10*s.* 6*d.* per analysis.

RICHMOND, C. E., M.R.C.S.E., L.S.A.L., has been appointed Resident Surgeon-Apothecary to the Warrington Infirmary and Dispensary, vice Joseph, resigned.

ROBERTSON, W., M.B., C.M., has been appointed Court Surgeon to the Earl David Wemyss Lodge of Foresters, Buckhaven, Fifeshire.

TATHAM, G. G., M.D., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator to the Wigan District of the Wigan Union and Workhouse.

WALKER, B., M.R.C.S.E., L.S.A.L., has been reappointed a Surgeon to the Rotherham Hospital and Dispensary for seven years.

WALLACE, Dr., Obstetric Physician to the Royal Infirmary, Liverpool, has been appointed Lecturer on Midwifery and Diseases of Women in the Royal Infirmary School of Medicine.

WALLACE, E. J., M.D., has been appointed Certifying Factory Surgeon for the Cleckheaton District, vice Bennett.

WOODWARD, F. E., L.R.C.P.L., M.R.C.S.E., has been appointed House-Surgeon to the Chester General Infirmary, vice Granger, resigned.

WOOLLEY, T. S., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Heanor Urban Sanitary District, Derbyshire, at £30 per annum.

Births, Marriages, and Deaths.

BIRTHS.

BURMAN.—On the 31st ult., at Maid of Honor-row, The Green, Richmond, Surrey, the wife of J. Wilkie Burman, M.D., of a son.

CORDNER.—On the 25th ult., at Aughnacloy, co. Tyrone, the wife of Louis Maxwell Cordner, L.K.Q.C.P.I., of a daughter.

LONGHURST.—On the 29th ult., at Wilton-street, the wife of Arthur E. T. Longhurst, M.D., of a son.

MILLER.—On the 23rd ult., at Ness Bank, Inverness, the wife of C. M. M. Miller, of Kincardy (late Army Medical Department), of a daughter.

THOMPSON.—On the 1st inst., at Sevenoaks, the wife of Herbert Thompson, M.R.C.S.E., of a son.

WIGHT.—On the 31st ult., at Liverpool-road, the wife of George Wight, M.B., of a son.

MARRIAGES.

BUCKLEY—WOOLLEY.—On the 1st inst., at Manchester, Samuel Buckley, F.R.C.S., of Cheetham-hill, to Florence, youngest daughter of the late James Woolley, of Manchester.

COOKE—PECHELL.—On the 5th inst., at St. George's, Hanover-square, by the Rev. Alfred Barry, D.D., Canon of Worcester and Chaplain to the Queen, Edward Marriott Cooke, M.B., Medical Superintendent of the Wilts County Asylum, Devizes, only son of Henry Edward Cooke, Esq., of Bury, Alverstoke, Hants, to Mary Anne Henrietta Cecil, fourth daughter of Sir George Brooke Pechell, Bart., of Alton House, Alton, Hants.

LEVERTON—KERBY.—At St. Michael's Church, Helston, by the Rev. W. E. Mackey, assisted by the Rev. A. Howard, Edward James Leverton, M.R.C.S., L.S.A.L., L.M., of St. Keverne, to Harriet Maria, eldest daughter of Richard Kerby, of Helston.

WHITHAM—INGHAM.—On the 5th inst., at St. Michael's Church, Haworth, Frederick Edward Whitham, of Moorhouse, Oxenhope, to Hannah Maria, eldest daughter of Amos Ingham, M.D., of Ash Mount, Haworth, Yorkshire.

DEATHS.

BARKER.—On the 2nd inst., at Waterloo-road, Dublin, John Barker, M.D., aged 63.

JESSOPP.—On the 12th ult., at Braintree, John Jessopp, L.R.C.P.Ed., aged 44.

MACROBIN.—On the 4th inst., at Aberdeen, John Macrobin, M.D., Emeritus Professor of Medicine in the Aberdeen University.

MARTIN.—On the 19th ult., at Cannes, France, L. J. Martin, M.D., of Melbourne, Australia, Senior Honorary Physician to the Melbourne Lying-in Hospital, Lecturer on Obstetrics to the University of Melbourne.

MILLER.—On the 27th ult., at Elm-grove, Ealing, John Miller, M.D., Surgeon-Major, aged 51.

NEIL.—On the 6th ult., at Lahore, India, Janie, the beloved wife of Surgeon-Major A. Neil, Professor of Anatomy and Surgery, Lahore Medical College.

PORTER.—On the 28th ult., at Torquay, Angus MacKay Porter, M.D., L.R.C.S.Ed., formerly of Belfast, aged 33.

WHITE.—On the 28th ult., at Blenheim-road, St. John's-wood, Charles John White, M.R.C.S.E., Surgeon-Major, Army Medical Department (on half-pay), aged 46.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.*

BOOKS ETC. RECEIVED.

E. Ward: Vivisection Necessary to Physiological Discovery.
Dr. H. R. Rogers: New Theories of the Great Physical Forces.
Louisa Lowe. My Story.
H. Carr: Our Domestic Poisons.
F. Rutley: The Study of Rocks.
J. Johnson: The Patentee's Manual.
Captain de Carteret Bisson: Our Schools and Colleges.
My Experiences in a Lunatic Asylum. By a Sane Patient.
H. Watts: A Dictionary of Chemistry. Vol. VIII. Part I.
Dr. M. Charteris: The Student's Guide to the Practice of Medicine.
Dr. D. H. Tuke: Metalloscopy and Expectant Attention.
G. N. Hooper: A Survey of the Carriages at the Paris Universal Exhibition, 1878.
P. F. Da Costa Alvarenga: Leçons Cliniques sur les Maladies du Cœur.
Dr. E. W. Berridge: Homœopathy Vindicated.
R. J. Godlee: An Atlas of Human Anatomy. Part VIII.
Brain. Part IV.
S. E. Ashton: Commercial Depression, its Causes and Remedy.
R. M. Millington: Selections for Latin Prose Composition.
The Physiology and Pathology of the Sympathetic System of Nerves. Translated by Dr. A. Napier.
Dr. T. S. Dowse: The Brain and its Diseases.
A. T. Norton: A Text-book of Operative Surgery.
Moore's Clinical Chart for Recording the Range of Temperature, Pulse, and Respiration.
Concord, or Medical Men and Manners of the Nineteenth Century.
Messrs. Baillière, Tindall, and Cox's Case-Book.
E. A. Abbott: Bacon's Essays. Text and Index.
Skating Rinks. By a Rinker.
The American Journal of the Medical Sciences. January.
The Magazine of Art. Part X.

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Feb. 6th, 1879.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb	Dry Bulb	Solar Radiation in Vacuo	Max. Temp. Shade	Min. Temp.	Rain fall.	Remarks at 8.30 A.M.
Jan. 31	30·31	E.	..	32	..	35	30	..	Overcast
Feb. 1	30·11	S.E.	..	30	..	32	26	..	Overcast
" 2	29·87	S.S.E.	35	37	..	40	28	..	Foggy
" 3	29·59	E.	38	38	..	40	36	0·06	Overcast
" 4	29·06	E.	38	36	..	38	32	0·32	Overcast
" 5	30·05	S.W.	32	34	..	45	31	..	Overcast
" 6	29·55	S.W.	44	45	..	53	32	0·08	Cloudy

Notes, Short Comments, and Answers to Correspondents.

THE BRITISH MEDICAL BENEVOLENT FUND.

AT the annual meeting of the above Fund, Sir George Burrows, Bart., President, in the chair, the Treasurer reported that £782 had been paid to forty annuitants, and £1385 distributed in grants at the monthly meetings of the Committee. In the report of the Committee it was stated that the applications for relief had been so numerous and urgent that in November the funds were absolutely exhausted; but on this being made known privately and in the medical journals, the friends of the charity had come to its assistance, and had not only enabled the Committee to meet immediate necessities, but to replace the reserve fund. Many of the cases, medical men and widows, were said to be so destitute that the sums voted were distributed in weekly instalments, and the Chairman of the Committee, Dr. Jonson, had sent out in this way more than 2000 cheque-bank cheques during the year. In other instances, however, families were saved from ruin, and a case was mentioned in which a widow and family of girls who had been left well provided for, but who had lost everything through the fraud of a trustee, and were dependent on their own exertions, came under the notice of the Committee at a moment when the entire family had been prostrated by scarlet fever, and the lives of some of them were actually endangered for want of nourishment. Liberal assistance was afforded, all recovered, and the young ladies, who supported their mother and themselves, returned to their occupations. Continued support is earnestly requested; and contributions may be sent to the Treasurer, Dr. Broadbent, 34, Seymour-street, Portman-square; the Chairman of Committee, Dr. Jonson, 16, South Eaton-place; or the Honorary Financial Secretary, Mr. Herbert Page, 28, New Cavendish-street.

M. P.—Napper on Cottage Hospitals, published by Lewis, Gower-street.

EXCISION OF A PORTION OF THE SPINAL ACCESSORY NERVE.

To the Editor of THE LANCET.

SIR,—The report in your last issue of the discussion on Clonic Torticollis at the Clinical Society states: "Mr. Parker said that in one case Mr. Rivington excised a portion of the spinal accessory nerve, but the movements continued." An ordinary reader would surmise that the movements of the affected sterno-mastoid continued after the operation. Nothing of the kind occurred. The muscle was set absolutely at rest, and did not again contract. Some movements, however, resulted from contraction of the splenius capitis &c. on the opposite side, and continued for a day or two, after which they ceased and did not recur. The patient appeared to be quite cured. Unfortunately, when the wound had nearly healed, erysipelas set in, became phlegmonous, and terminated fatally. The case would have been published ere now but for the circumstance that my notes were not complete. The earlier history was taken by Dr. Hughlings Jackson, who transferred the patient to me for the operation, and is not in my possession. The spinal cord, which seemed to Dr. Sutton and to myself to be sclerosed in the cervical region, was reserved by Dr. Sutton for microscopical examination, and I was naturally desirous of having his opinion as an authority on fibroid changes. Somehow or other the specimen was mislaid after it had been put on one side, and the report on the state of the cord will never see the light. I am not sure that any great advantage would result from publishing the case in its maimed condition, except that the publication would be protective against error.

Requesting you to oblige me by the insertion of this correction,

I am, Sir, yours &c.,

Finsbury-square, Feb. 4th, 1879. WALTER RIVINGTON.

Practitioner should consult his legal adviser, placing all the papers before him for mature consideration.

Mr. Bodley is thanked. The case shall be carefully considered.

Mr. B. Smith.—The bodies of all persons hanged at the Old Bailey for murder were formerly claimed by the College of Surgeons, and after a post-mortem examination by Mr. Clift, the Conservator of the Museum, in the presence always of Sir William Blizard and one or two members of the Council, presented in turn to the anatomical schools in the metropolis. The bodies of Bishop and Williams were so handed over, the former to King's College, and the latter, we believe, to the London Hospital.

Chirurgeon, (Southampton.)—The late Dr. Scott, F.R.C.S. Eng., of Southsea, Hampshire, was the first to perform œsophagotomy in this country, followed by Mr. Edward Cock, of Guy's Hospital.

Mr. J. T. Baymann.—It is against our rule to exchange.

SANITARY CONDITION OF THE ISLE OF ST. THOMAS.

To the Editor of THE LANCET.

SIR,—As health officer in St. Thomas, I request you to publish the following remarks.

I am surprised to find in your issue of the 7th ult., page 866, in Dr. Caddy's paper on the "Identities of Cerebro-spinal Meningitis, Dengue, and Yellow Fever," the following passage:—"A recent telegram reports a severe outbreak of yellow fever at the Danish West India island of St. Thomas, which, like the Havana, has its land-locked harbour and the usual filth at the anchorages, which is most offensively stirred up when ships either drop or get up their anchors."

Whilst denying most positively the truthfulness of the telegram in question, and declaring that for some time there has not been any case of yellow fever in St. Thomas, I cannot but express my regret that the interests of this community should be prejudiced, as certainly they are, by the circulation of such false reports as that conveyed by the telegram, and those that are in some instances spread by means of Consular bills of health. It is but a couple of months since Her Britannic Majesty's Consul in St. Thomas, Mr. Geo. A. Stevens, issued to the Royal mail steamship *Arno* a bill of health, stating "Fatal yellow fever raging here." This bill of health the Consul issued before seeking information from the Colonial Government as to the actual state of matters. If he had made proper inquiry, he would have learned that at the time (October 26th) not even a single case of yellow fever existed in the place. Mr. Stevens eventually found himself compelled to withdraw the bill of health, and substitute another; but unfortunately the American brigantine *Adelaide*, which left St. Thomas at the same time as the *Arno*, was by the same functionary provided with a bill of health of the same tenor as the one he, as stated, had issued and was obliged to withdraw in the case of the *Arno*. The *Adelaide* was bound for Demerara, where the bill of health caused much alarm. Now, Sir, if the two bills of health and the telegram alluded to in Dr. Caddy's paper have the same author, you will know what confidence to place in the telegram. The simple fact upon which this and similar reports have been built up is that some sporadic cases of yellow fever occurred here last year.

When Dr. Caddy calls the harbour of St. Thomas "land-locked," I think he can hardly have been in St. Thomas. The harbour is wide open to the south, and has a free outlet to the west. As for the "filth" which he says "is most offensively stirred up when ships either drop or get up their anchors," I can only say that I know nothing about it from my own experience, although I go out in the harbour several times every day, and I have not heard others speak of it.

I would consider it a particular favour if you would kindly allow these remarks a place in the next issue of THE LANCET.

Yours respectfully,

CHR. BRONDSTED,
King's Physician.

St. Thomas, Jan. 14th, 1879.

*** We are glad to give insertion to the above letter on the "Audi alteram partem" principle. But Colonial Governments will never make way in such matters until they ignore the antiquated and absurd quarantine laws by which they are still governed, and endeavour to imitate a system of intelligent sanitary supervision similar to that which now obtains in the port of London. *Vide* No. 10 of the Report of the Port Sanitary Committee of the Corporation of London, presented in the autumn of last year, and procurable at the Clerk's Office, Guildhall, London.—ED. L.

Mr. J. A. Fuhis.—We do not undertake to advise intending patentees how to carry out their schemes, or to aid them with scientific suggestions in the enterprise. The request is almost comic. The aid of a practical chemist would, doubtless, be obtained "for a consideration."

A DISCLAIMER.

To the Editor of THE LANCET.

SIR,—In a letter from your "Special Commissioner" to the *Metropolitan* of Feb. 1st, I find the following statements:—1. "That 200 sick persons in the workhouse were treated as the guardians and the master chose, and the doctors were only called in from the infirmary to give advice and directions, which were often not followed." I must emphatically deny that this is, or that I ever said this was, the case, all medical directions as to diet and treatment being universally carried out, though, as I observed to him, the medical officers do not perform the warding, and are therefore not responsible for the overcrowding of patients. The second statement I must contradict is, that "they (the doctors) have not been able to obtain a movable screen." This seems to imply that the guardians had been asked, and refused, to furnish a screen, which is not correct. My exact words were, in answer to a question from the Commissioner as to how the wards were supplied with spittoons, screens, &c., "that the wards were well furnished with the former requisite, but not with screens available for use."—Yours obediently,

RIDLEY DALE,
Assistant Medical Officer.

The Infirmary, St. George's-in-the-East, Feb. 1st, 1879.

THE REMOVAL OF NON-PAUPER CASES.

THE memorial which the Limehouse District Board intend presenting to the Home Secretary has failed to elicit any general support from the various metropolitan vestries &c. This document urges the amendment of the law so as to legalise the reception of non-pauper patients suffering from small-pox and other infectious diseases at the hospitals of the Metropolitan Asylums Board. Far from expressing any opinion in favour of this suggestion, the Chelsea vestry simply referred it to their Sanitary Committee; while at Clerkenwell two vestrymen argued that no notice should be taken of the matter, and the letter from the Limehouse District Board was merely laid on the table. At Holborn even this was not done, the members of the District Board of Works agreeing with the Chairman's proposition that no action should be taken in the matter. The Stepney guardians are somewhat perplexed by the question in its general bearings, and this has led to lengthy discussions, ending in a tacit understanding that the relieving officers will continue to remove infectious cases. On the other hand, the Whitechapel Board of Works have appointed a delegate to present the memorial to the Home Secretary, and this course has also been adopted by the guardians of St. George's-in-the-East. The above decisions, given in the course of one week, suffice to show that the various local authorities of London entertain very different opinions on the proposed course of action. This is, nevertheless, a question that requires immediate settlement. We cannot expect to suppress small-pox &c. unless there is ample and accessible hospital room for those whose lodgings are so small and means so slight that they cannot be properly isolated at home, but who are, nevertheless, far above our pauper classes.

Cambrian.—The only way of restraint is to take proceedings against the person for falsely using professional titles. We know of no other sources of such a title than those named.

Mr. H. Cant.—Write to the Secretary of the College.

THE PROPHYLACTIC TREATMENT OF POST-PARTUM HÆMORRHAGE.

To the Editor of THE LANCET.

SIR,—I am glad to see that so competent an authority as Dr. Spender, of Bath, has taken this subject in hand. I may say, in passing, that it is particularly gratifying to one, like myself, whose faith in medication is on the decline, to find that the era of preventive medicine is at last dawning on our therapeutic-ridden country. When the dreary winter of our therapeutic discontent has given place to the sunshine of a better time, "prevention" will be the rallying point and watchword of schools and systems the most divergent. It is only by some such combination that "preventive medicine" will make its influence felt on the vital statistics of the country, and succeed in wiping out the foul stain of our fearful national infantile and other preventable mortality. Herein lies the importance of Dr. Spender's remarks on the *remote* prophylactic treatment of post-partum hæmorrhage. For it is only natural to suppose that a high degree of maternal health will have not only a direct influence on the parturient process, but a still greater on the degree of vitality of the offspring.

But, alas, in our artificial age the converse conditions exist; and while boys and girls in their teens are allowed to marry with impunity, the cases will be fewer and fewer in which unassisted nature will be able to complete parturition. Those who know anything of Leicester will not be surprised to hear that of 66 deliveries (chiefly primiparæ) during the past year, no less than 20 cases required instrumental assistance after the due exhibition of ergot. This is over 30 per cent. of the total deliveries.

I always use Dr. Barnes's long forceps, and never allow pronounced symptoms of exhaustion to supervene, provided the os be two-thirds, or even less, dilated. I have discarded the use of chloroform, and, notwithstanding Dr. Spender's somewhat severe criticism on this point, I feel bound to maintain my position. Dr. Spender gives no comparative statistics of post-partum hæmorrhage in the presence and absence of chloroform; but he quotes Drs. Sansom, Richardson, Tyler Smith, and others in favour of its use when diluted with two-thirds of "absolute alcohol." I should think its specific effects would be very much modified when inhaled in this form; and, further, there is much vagueness in the statement that Dr. Courty, of Montpelier, has "adduced some forcible arguments in favour of the employment of anæsthetics during natural labour." This statement is not improved by what follows—namely, that he (Dr. Courty) "actually mentions the comparative absence of hæmorrhage as a point which strikingly tells on the side of his thesis." "Comparative absence" implies occasional presence, and, therefore, in the absence of precise comparative statistics, the statement is next to worthless. Let me assure Dr. Spender—and I do so with the utmost possible deference to superior learning and age—that I have not found chloroform to be a "blessing beyond all price to the operator," but rather the contrary, as, unless complete anæsthesia be induced, the patient's semi-consciousness adds much to her restlessness in consequence of the "circulatory" stimulation to which he calls attention. Moreover, how can *one* man administer chloroform and deliver with the forceps at the same time? I have certainly done it, but at fearful risks, and only by inducing and keeping up complete anæsthesia. If the labour be natural, the "period of comparative rest" and absence of "irritability," which Dr. Spender attributes to the use of chloroform, are much better obtained in 99 cases out of 100 by spontaneous sleep on the patient's part, unless prevented by a nervous nurse and a palavering doctor. Are we justified in supplanting nature's sweet restorer? If not, much less are we justified in depriving the patient of volition when her consciousness is invaluable as a guide to us and to her own condition. To yield, therefore, to a patient's solicitation, or to voluntarily administer an anæsthetic, is to destroy the harmony and forcibly alter the rhythm of the parturient process.

Hence, discarding sentiment and tradition, I cannot agree that the disuse of anæsthetics in natural, as in instrumental, labour is "inhuman and a backward step in scientific practice." It is a different matter when mother or child, or both, must or may be sacrificed. There can be no objection then to the use of an anæsthetic. But to incur the risk of anæsthesia during a natural process, or an operation involving the life of neither, is both unscientific and unpardonable. Let us use an anæsthetic by all means if we wish to prolong the labour up to the point of exhaustion, when we shall have to encounter not only uterine inertia, but universal vaso-motor paralysis.[1]

The majority regard the use of the forceps as a momentous operation to be completed with all speed, and without regard to the feelings of mother or child. Such operators require chloroform, and even then there is a lacerated vagina, a ruptured perineum, and a still-born or mutilated baby; whereas the use of the long forceps may be reduced to an operation as painless to the mother and harmless to the child as natural labour itself. But there must be no departure from the rhythmic action of natural labour, and, having regard to this, our great teacher, why delay if the os be two-thirds, or even less, dilated, and if our own and the patient's consciousness tell us that it is time to operate.

I have adhered to my own experience throughout, and of the 20 forceps cases referred to, and more than double that number operated on without chloroform or other anæsthetic, of which I have not kept notes, I can safely say that there has been no post-partum hæmorrhage; indeed, if anything, the "loss" has been less than after natural labour, and the convalescence, as might be expected, considerably expedited. My first and last perineal rupture of any consequence occurred in 1872, when using short straight forceps. Hence it is that I always use Dr. Barnes's long forceps since I first obtained and learned to apply them by means of his book on "Obstetric Operations."

The removal of the forceps, however, at the head clears the outlet and judicious support of the perineum, after Playfair, and, above all, the avoidance of hurry, which may be necessary to the extent of resisting the final expulsive efforts of the mother, combine to render perineal rupture a comparative uncertainty. In prolonged and difficult cases there may be temporary retention of urine, which, however, seldom requires catheterism.

With regard to the child, I have never lost a case. This good fortune I attribute in the main to (1) relaxation of the instruments between the artificial pains, which is a hint obtained from nature; (2) prompt delivery after the birth of the head, which is easily accomplished by hooking the forefinger in the child's axilla, or by bringing down an arm, which relieves all tension, and generally completes the second stage; and (3) persistent artificial respiration if there should happen to be undue cerebral congestion.

The importance of the subject must be my apology for this untoward trespass on your valuable space.

Your obedient servant,
Leicester, Jan. 13th, 1879. ALEX. M'COOK WEIR, M.D., &c.

Mr. J. T. Jones should consult recent works on Pathology, of which our advertising columns contain announcements.

Mr. J. Spottiswoode Cameron.—We have not received the paper or report alluded to.

Lex.—The payment is according to a fixed scale.

SUSPENSION IN THE TREATMENT OF POTT'S DISEASE OF THE SPINE.

To the Editor of THE LANCET.

SIR,—In a letter in THE LANCET of Jan. 25th, on the above subject, Mr. Fisher says: "It has been rumoured that grave results have attended this method of extending the spine," but that he has received no authentic information upon the subject. Such being the case, the following may have some interest for him or other members of the profession.

About August last a little boy, between two and three years of age, was brought to me, suffering from antero-posterior curvature of the spine, situated in mid-dorsal region. After examining the child, I advised the mother to allow me to put him up in a Sayre's jacket, and after a great deal of persuasion, and getting a satisfactory account from the mothers of other cases which I had treated in a similar manner, she consented. I suspended the child in the manner with his big toes just touching the ground. The child cried during the whole operation, which did not take more than ten minutes, notwithstanding the presence of his mother. This being nothing unusual, I did not take any notice of it, but continued to the end, and in due course proceeded to take him down, an assistant unfastening the buckles whilst I held him in my arms. You can easily imagine my horror at this moment when his head fell quite helplessly on one shoulder, and rolled about as he was moved. I laid him on the sofa, tried to feel his pulse, but could not, neither could I perceive that he was breathing; in fact, I could not see any signs of life. Whether or not the case would have terminated fatally had he not been taken down at this moment is a question upon which I have very decided opinions; but I am happy to say that, after resorting to the usual remedies adopted in cases of suspended animation, the little fellow came round, and is now able to run about and play with his "wall" (as he calls it) on.

I think I ought to mention, in case Mr. Fisher or others may feel inclined to impugn the method of conducting the operation, that the *modus operandi* was that which I was taught when a resident at the East London Hospital for Children, combined with the results of a superficial reading of Sayre's book.

I am, Sir, yours obediently,
JULIUS CÆSAR, L.R.C.P. Ed., &c.
Victoria Dock District Provident Dispensary, Jan. 1879.

[1] Here it is important to note that "within the scope of a comparatively small practice in midwifery, it has been" Dr. Spender's "misfortune to meet with several cases of extreme flooding after the birth of the child." Was this "extreme flooding" due to the use of chloroform during labour, or to constitutional causes?

A FILTHY SPOT.

AT a late meeting of the Town Commissioners of Galway, a communication was received from a clergyman relative to the sanitary condition of a locality called the "Winding Stairs." The reverend gentleman stated that he visited the place with a guide, as much required there as in the catacombs of Rome. The wretched inhabitants whom he visited appeared to have lost all human instinct, and to have become brutalised in their domestic habits. The overcrowding, want of proper ventilation, and total absence of all sanitary requirements appear most disgraceful.

Dr. Woodward.—The case shall be noticed.

MR. DUNMAN'S "GLOSSARY OF BIOLOGICAL TERMS."

To the Editor of THE LANCET.

SIR,—In a notice of my "Glossary of Biological Terms" in your last issue, the reviewer says he does not know on what principle the words have been selected, and then proceeds to give a list of botanical and pathological terms, which he thinks should have been included. Will you kindly allow me a small portion of your valuable space to reply to the questions which your reviewer asks? With respect to the botanical and pathological terms, he will perhaps allow me to refer him to the preface (which I think he cannot have read), and in which it is stated that only such of the first are included as occur in the Text-book of Elementary Biology by Huxley and Martin, while of the latter only such words have been noticed as occur in the ordinary Physiological text-books. With respect to such terms as "Visual Purple," "Brownian movement," &c., I submit that these, fully explained in the text-books in which they are used, should rather find a place in an encyclopædia than in a glossary. Such anatomical terms as the "Fissure of Rolando" are also fully explained in every text-book of Anatomy, and were not included by me because, space being an important object, I was desirous of including such terms as are met with, but not fully explained in, ordinary anatomical and physiological works.

Whilst endeavouring thus to answer the queries of your reviewer, he will, I trust, allow me to thank him for pointing out such important omissions as "Os Transversum" and "Post-temporal," and to assure him that they will be supplied in the second edition now in course of preparation.

Yours obediently,

Chadwick-road, Peckham, Feb. 5th, 1879. T. DUNMAN.

Dr. Deroubaix, (Bruxelles.)—The instrument was first described in a paper read before the Royal Society in April or May last, and will be found in the Society's Transactions. Numerous notices appeared in *Nature* for the months of May and April. The instrument is made by Mr. Apps, Optician, 433, Strand, W.C.

Health.—It is not professional to divulge medical secrets to private friends. The second question is rather legal than medical.

PUERPERAL ECLAMPSIA.

To the Editor of THE LANCET.

SIR,—I beg to forward you particulars of the following case as an addition to the list of favourable terminations of a disease well characterised by Playfair "as one of the most formidable with which the obstetrician has to cope."

On the afternoon of the 10th December I was summoned hastily to attend Mrs. P——, aged twenty-two, a primipara, near her full term, and who was reported to have had two fits. On my arrival about six o'clock I found the patient in a somewhat confused state, and was about to inquire into the particulars of her illness when suddenly she was seized with a third convulsive attack. Her features were distorted, the eyeballs turned up, the face became livid, froth issued from the mouth, and the limbs were violently contracted. For about five minutes she remained in this condition, at the end of which time she did not, however, completely recover consciousness. On inquiry I learned that she had apparently been in good health until now, with the exception of having suffered from a violent attack of headache on the previous night, which had abated in the morning. Swelling of the face and extremities had, however, been observed for the previous week. A mixture of bromide of potassium and chloral hydrate, along with a purgative, were prescribed. On my second visit, two hours after, I was informed that the medicine had been vomited, that she had two more severe fits, and was now unable to swallow. A similar mixture was, therefore, ordered as an enema, to be repeated at stated intervals, and a purgative injection, which acted freely. Subsequently she had two more attacks, the last taking place at half-past two o'clock on the morning of the 11th, after which they did not recur. At my forenoon visit of that day I found the patient fully conscious, and ordered the first mixture to be continued. Next day acetate of potash and broom, together with a powder of compound jalap and acid tartrate of potash, were prescribed. On the afternoon of the 13th the patient complained of slight abdominal pains; and in the evening, after a short and comparatively painless labour, was safely delivered of a healthy and apparently fully developed male child. Until now both mother and infant have progressed most satisfactorily, not a single untoward symptom having shown itself. For the first few days following the accouchement a large quantity of pale-coloured urine was passed, and within that period the œdema completely disappeared. During the convulsive attacks the urine was found to be half albumen, and eight days afterwards was normal.

The patient's only former illness had been an attack of scarlatina about three years ago, not followed by sequelæ.

Your obedient servant,

Leith, Dec. 30th, 1878. O. H. GARLAND, M.B., M.R.C.P. Ed.

PAPERS ON PUERPERAL CONVULSIONS.

IN reply to the request of "Lux" (page 143), we would refer him to the "Medical Digest," published in 1877 by the New Sydenham Society, in which, at section 1588, he will find references to most of the papers that have appeared upon this subject during later years ending 1876.

Mr. T. Ashcroft.—1. The returns of the Lunacy Inspectors in the various States of America can be procured; but there is not, so far as we are aware, any general returns which would be available for the purpose of determining the proportion of cases "assigned"—we cannot say *traced*—to spiritualism as a cause. The statistics which have been quoted in connexion with this subject have been questioned.—2. The particulars will be found in the Medical Directory.

Ignoramus.—Our correspondent's own practitioner will advise him on the subject.

ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—I have read with much pleasure the letter with reference to the Medical Department of the Navy at page 67 of THE LANCET of the 11th inst.; and having served upwards of twenty-five years in the Medical Department of the Army, I trust you will consider my experience such as to justify my making a few remarks in a similar spirit with reference to it.

When I joined the service in 1839, its advantages were very far short of those derived from it at the present time, and yet candidates were plentiful, and it was considered a matter of much difficulty to obtain admission into it. From time to time various Warrants have been issued, each materially improving the pay, retiring pensions, and status of medical officers, and very lucrative appointments in India have been thrown open to its upper ranks, and yet it is now said that, as a future career in life, it is not worthy the attention of young men who have just completed a medical education. In my opinion, the root of all the discontent which prevails is to be found in the giving to medical officers what has been termed relative rank, but which by them has on all occasions proved to be a delusion and a snare, and a source of much disappointment. A young man belonging to a strictly civil profession enters the service, puts on a uniform, grows a moustache, and dines at a mess, where the conversation is for the most part military, and it is not to be wondered at if his character and ideas become gradually changed and identified with those of his surroundings. He is granted the relative rank of a lieutenant, captain, major, lieutenant-colonel, colonel, and major-general, but finds this rank totally ignored on all occasions, whether at mess meetings, parades, or in private society. He consequently becomes a discontented, unhappy, and in many cases it is to be feared a more or less inefficient member of the department to which he belongs. If young men who have determined to enter the Medical Department of the Army would from the first recognise the fact that they belong to a civil profession, and that their position in the service can never be on a similar footing with that of officers of the same so-called relative rank belonging to the combatant branches of the service, much of this heartburning and disappointment would be avoided. They should always reflect that the respect and good-feeling of those with whom they are called upon to associate are to be obtained, not by so-called relative rank, or by the wearing of badges of military rank and spurs, but by an upright and conscientious discharge of their professional duties, and by a corresponding deportment in private life. This alone will gain for them the good-will of those whose good opinion is worth having, and render them happy and contented in their position in the service. I have no hesitation in saying that young men entering the service with these feelings will find in it not only an income sufficient to meet their present wants, but also a liberal provision for the future, when at the age of sixty the rules of the service demand their retirement. If in the meantime they should have been called upon to serve in India, which is now almost invariably the case, they will have been in the receipt of such an income as will have enabled them to lay by a considerable portion of it, a surgeon-major in that country receiving £1200 a year, a deputy surgeon-general £1800, and the principal medical officer £2700. Surely such a career as this, with all the advantages of seeing foreign countries at the public expense, is much to be preferred to that of a young struggling practitioner in private life, with all its anxieties and exposure to the caprices and exactions of private patients, often hardly earning sufficient to exist upon, and when old age comes on without provision for the future, and with the painful feeling that at his death he will leave those dependent upon him in poverty and want. To be happy and contented, however, it is indispensably necessary that he should on all occasions regard himself as a civilian attached to the service, and not endeavour, in consequence of his relative rank, to place himself in competition with, or perhaps in opposition to, those placed in military authority over him.

I remain, Sir, yours truly,

January, 1879. SURGEON-MAJOR.

Æsculapius.—1. The qualification is only a surgical one, and only entitles the possessor to recover in surgical cases.—2. A man possessing such qualification is not liable to prosecution, though, if not registered, he is prevented from recovering, from signing certificates, holding appointments, &c.

Inquirens should address his inquiry to a professional chemist, or possibly he may ascertain the facts by reference to some work on the construction of hospitals. Some data may be gleaned from our advertising columns. We cannot particularise.

Mr. Harding.—The case is extremely painful; but it is obviously one in which we cannot interfere.

L.R.C.S.I.—Address an inquiry to the Dean of the Medical Faculty of the University named.

Mr. Segrave.—Before resigning, appeal to the Local Government Board as a matter of principle.